

skin diver

FOREMOST AUTHORITY IN ITS FIELD

OCTOBER 1987

\$2.95

UK £2.40

MAKING MONEY DIVING FOR URCHINS

\$300 PER DAY IN SEASON

[OCTOPUS ENCOUNTER

THRILL OR THREAT?

DIVE CONSOLES:
DIGITAL & ANALOG

TAKE A DIVE TRIP

AUSTRALIA • BAHAMAS

BELIZE • BRITISH V.I.

MALDIVES • PAPUA NEW

GUINEA • SOLOMON IS.

FLORIDA SPRINGS



IT BREATHES AS GOOD AS IT LOOKS — THE OMEGA II

Omega II's not only good looking, it's a whole new breath of fresh air.

Light, natural, extremely comfortable, an extension of all that's familiar.

Bubbles flow behind you, not into your face.

The patented mouthpiece gives you freedom from jaw fatigue.

It's the one high performance regulator you already know how to use because it breathes the way you do.

At only six ounces, that's saying quite a mouthful about a regulator that's anything but.

And with only two moving parts annual checkups are just that . . . checkups!

Check it out. Omega II's good lookin' all right — but you'll love it just for its personality.

To find out more about Omega II's vital statistics. Give us a call.



Oceanic
USA

DIVING ESSENTIALS REDEFINED

1-800-458-8880

circle #101 on Reader Service Card

**Dive Time
Right Time
Air Time
Beach Time
Ski Time
Work Time
Play Time
Big Time
Party Time
Good Time
Any Time
HEUER TIME**



**Matte black stainless steel and
goldplated bracelet.
Uni-directional turning bezel.
Mineral glass.
Swiss quartz technology.
Water resistant to 660 feet.**

TECHNIQUES D'AVANT-GARDE



TAG-Heuer

960 S. Springfield Avenue
Springfield, NJ 07081
(201) 467-1890

West Coast:

1900 Avenue of the Stars
Century City, CA 90067
(213) 556-8208

Canada:

The Chronometric Company Ltd.
10271 Yonge St.
Richmond Hill, Ont L4C 3B5
(416) 883-5131

wenoka®

SEA STYLE®

PROFESSIONAL QUALITY, INNOVATIVE DIVING PRODUCTS
AVAILABLE IN
THE FINEST SCUBA STORES WORLD WIDE.



Visit Your local PRO DIVE STORE for a
close up look at the UNIQUE and COLORFUL
SEASTYLE Line.

Copy Right 1987
Schur Inc.
All Rights Reserved

RESEARCH / DESIGN / ENGINEERING / QUALITY

P/O Box 8238 West Palm Beach, FL 33407

skin diver

Volume Thirty-six Number Ten

PHOTOGRAPHY

- 12 SDM'S NIKONOS COURSE** /GERI MURPHY
- 36 AQUAVIDEO UNDERWATER HOUSING** /JIM AND CATHY CHURCH
- 40 SDM'S U/W VIDEO COURSE** /JIM AND CATHY CHURCH
- 51 AQUA VISION'S LED ILLUMINATOR** /GERI MURPHY

MARINE LIFE

- 24 OCTOPUS ECSTASY** /GERI MURPHY
- 30 MAKING MONEY DIVING FOR URCHINS** /JAN MLNARIK

THE GOURMET DIVER

- 26 CALIFORNIA LOBSTER** /BONNIE J. CARDONE

WRECK DIVING

- 28 DISCOVERY OF THE FUMITSUKI** /ROD AND KATHY CANHAM
- 116 DOG HOLE SCHOONERS PART II** /E.R. CROSS

LOCAL DIVING

- 34 GINNIE SPRINGS** /DOUG PERRINE

DIVE EQUIPMENT

- 38 TUSA LIBERATOR CONSOLE** /GERI MURPHY
- 44 DATAMASTER I DIGITAL CONSOLE** /GERI MURPHY
- 49 SHERWOOD SILHOUETTE BC** /JIM WALKER
- 52 DACOR PACER XLE 260 REGULATOR** /ERIC HANAUER
- 112 DACOR XENON STROBE LIGHT** /JIM WALKER
- 114 WENOKA'S LOBSTER GLOVES** /BONNIE J. CARDONE

BOATING

- 48 DELTA 38** /GREG JOHNSTON
- 56 ACHILLES SK-140 INFLATABLE** /GEORGE COZENS

OVERSEAS TRAVEL

- 60 BAY ISLANDS** /RICK FREHSEE
- 71 PYRAMID ISLAND RESORT** /GREG JOHNSTON
- 74 TROPIC BIRD** /GREG JOHNSTON
- 78 RIDING ROCK INN** /STEPHEN FRINK
- 90 EXOTIC TRIPS TO DISTANT SEAS** /AMOS NACHOUM
- 94 SURFSIDE EXPLORER** /BILL GLEASON
- 104 DIVING NEWS FROM DOWN UNDER** /GERI MURPHY

MISCELLANEOUS

- 98 PETER GIMBEL—IN MEMORIAM** /JACK MCKENNEY

COLUMNS

- | | |
|---------------------------|-----------------------------------|
| 16 WRECK FACTS | 107 NEW FOR '87 |
| 22 DIVING MEDICINE | 158 I LEARNED ABOUT DIVING |
| 86 TECHNIFACTS | |

DEPARTMENTS

- | | |
|----------------------|---------------------------------|
| 10 CALENDAR | 150 DIVER'S DIRECTORY |
| 19 SCUBA QUIZ | 157 ADVERTISER DIRECTORY |

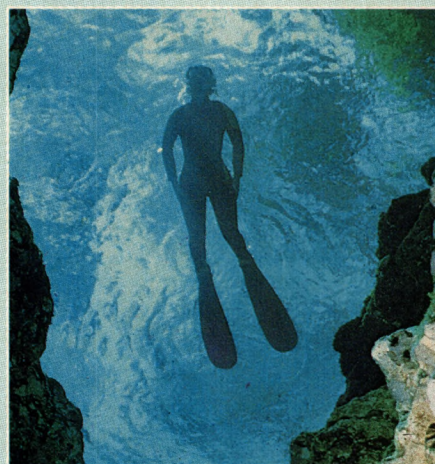
COVER

The octopus is a creature of exotic form, fascinating behavior and comparatively high intelligence. It can alter its skin color at will. For a close look at this amazing animal, see page 24. Photo/Geri Murphy.

© Copyright 1987 by PETERSEN PUBLISHING COMPANY. All rights reserved.



Close-up on macro/Page 12



Air or water?/Page 34



Loose screw or big bucks?/Page 30



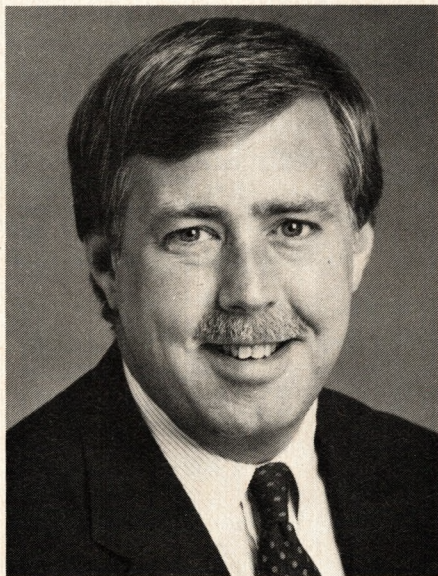
Above: Floating comfort/Page 74



Left: Pacific ensemble/Page 90

SDM Editorial

BY BILL GLEASON



THE \$30,000 SPEEDING TICKET

"I got caught speeding." Strangely enough, these four simple words usually provoke a sympathetic and friendly response such as, "Oh, that's too bad. You have to watch out for those cops on I-55." And, for those able to think ahead about their own speeding, there follows the almost universal, "Where did you get caught?" and "How fast were you going?"

No one, of course, has ever said, "You idiot, why were you speeding in the first place?" (Not even my wife, who has observed and labeled much of my behavior as being in the idiot class.) As long as you're sober, not reckless and under about 75-80 miles per hour, speeding seems to be a tolerated and acceptable part of American life. The general feeling is that "they" (usually the cops) are at fault. The real crime is not doing 65 in a 55 mph zone, it is getting caught.

I always wondered if our national tolerance of highway speeding extended to diving. So, sharing a beautiful and dramatic 60-80 foot deep dive in warm, clear water with 16 other divers, I decided, slate in hand, to time the ascent rates of the different sets of buddies. With about five minutes to spare on a 40 minute dive, the divemaster signaled for an ascent from 62 feet. No anchorline was present since it was a drift dive. There was just 62 feet of blue water to rise through and then we'd be back on the surface. Since diving's "speed limit" is 60 feet per minute, it should have taken the divers a minimum of 62 seconds to reach the surface.

Twenty-eight seconds later, the first buddy team broke the surface. The next

five buddy teams all came up in 35 to 45 seconds. Only two buddy teams took longer than 60 seconds, and both of them stopped for a ten foot safety decompression stop.

Comparing this behavior to driving the freeways (speed limit 55 mph), the first team was clocked doing a modest 121 miles per hour. The balance of the speeders hit the radar gun between 75 and 97 mph. Overall, 75 percent of these otherwise well-equipped, fairly experienced divers (between 30-50 past dives each) were speeding.

On the boat, no one mentioned speeding. Everyone was jazzed and talking about the dive; the usual "post-dive high" was in effect everywhere. Even the next morning, no one mentioned that 75 percent of the group had acted like high school kids with a new Corvette.

Of course, there are no "smokeys" underwater. But, there are expensive "speeding tickets:" Decompression sickness, air evacuation, recompression treatment, etc., can cost as much as \$30,000. Lifetime paralysis is thrown in at no extra charge. That's a big, big speeding ticket.

I'd like to report this was an isolated incident, but I repeated my ascent rate survey with four different groups with similar results. I didn't catch anyone going more than "100" again (nearly doubling the safe ascent rate) but more than 50 percent of the divers exceeded the 60 foot per minute rate. The finding, therefore, is that most divers do not make safe ascents—particularly when not using an anchorline or ascent line!

Are you a speeder? Time yourself on your next ascent. This, in itself, is not particularly easy. Sure, you can look at your watch when you begin to come up and again when you reach the surface. But, that doesn't give you the true picture. You could have spent 40 seconds between 60 and 30 feet and then bombed up the last 30 feet in only 20 seconds. That, by the way, was the error most of the speeders made. They all *started slow*, but didn't *finish slow*!

Time yourself over the entire ascent. Technically, this is a little tricky. Many of us wear our watches on our left wrist. That's the same hand that holds our depth gauge during ascent (when it's in a console). And, it's the same hand that controls our buoyancy compensator.


(Hint: Move your watch to the inside of your right wrist. Hold your buoyancy compensator hose in your left hand and hold your gauge console in your right hand, beside your watch.) After you've practiced this topside, time yourself in 10 second/10 foot intervals and you'll get a good idea of whether or not you're speeding. *Be very careful, and slow, from 30 feet to the surface.* Most rapid ascents take place here!

The biggest cause of speeding ascents is lack of buoyancy control. Divers who are religious about maintaining their buoyancy on the bottom seem to get disoriented when they're ascending without a line or other reference point. Many divers are also overweighted, causing too much air to be pumped into their BCs. All this air has to be let out as it expands on ascent and most of it has to come out between 30 feet and the surface. And, that's the "danger zone," where you should go the slowest!

Follow these guidelines for making safe ascents:

1. Give yourself enough time to make a safe ascent. Start up at least five minutes before the no-decompression limit.
2. When you're a new diver, use the anchorline and slowly pull yourself up to the surface (gloves help!). As you become comfortable, time yourself next to the line until you become proficient in all aspects of buoyancy control. That means you can stop and maintain your depth (within a couple of feet) at any point during your ascent. (This is much harder than it sounds!)
3. Make a ten foot safety stop.

New hyperbaric research indicates that, in the future, the "speed limit" will definitely be lowered. New instrumentation (such as most multi-level computers) already reflects ascent rates only about half as fast as 60 feet per minute. Take a cue from the cutting edge of safe technology in diving. *Slow down!* And, get *slower* the closer you get to the surface! Get your buoyancy under complete control and time your ascent rate.

A \$30,000 speeding ticket is just too big a risk. We all spend a great deal of time and money to get underwater. Let's not be in such a rush to leave. At ten feet, savor that dive and make sure all your plans for getting on the boat or back to shore are safe and complete. Finish every dive with no "smokeys" in sight! 

HI TECH DIGITAL INFORMATION CENTER FROM

NEW FOR 1987



DIGITAL
ACCURACY
OF ± 6
INCHES
AT ANY
DEPTH

This is the console that has it all—unmatched digital accuracy and compact convenience. All the information that you need to know is at your fingertips, dive after dive. This new Dacor console represents a step forward in underwater instrumentation—the gauge by which all others will be measured.

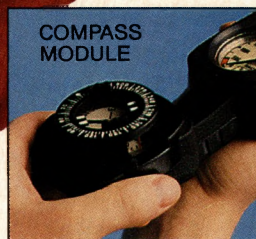
DIGITAL INSTRUMENTATION

- ☐ Surface interval time
- ☐ Counts number of dives
- ☐ Current depth
- ☐ Maximum depth
- ☐ Bottom time
- ☐ Battery indicator

ANALOG INSTRUMENTATION

- ☐ TAG-2 pressure gauge registers to 4500 psi with color coded dial
- ☐ Thermometer from 15-130°F

COMPASS MODULE
adds to console and locks in place. Sold separately.



COLOR COORDINATE YOUR
CONSOLE TO ALL YOUR GEAR WITH
DACOR'S EXCLUSIVE
LINE OF

divecolors™



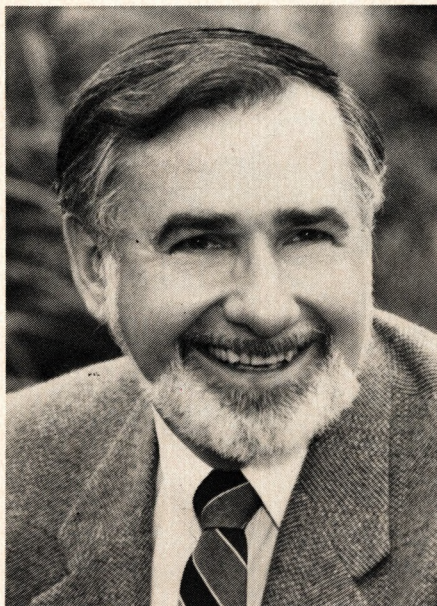
DACOR CORPORATION

161 Northfield Road, Northfield, IL 60093
Phone (312) 446-9555

Send Dacor \$3.00 for a Dacor Diver Kit.
Includes catalog, cloth patch, decomp table, decals.
circle #104 on Reader Service Card

SDM Editorial

BY PAUL J. TZIMOULIS



HOW MUCH TRAINING IS ENOUGH?

higher learning and greater experience.

Some experts say it takes 50 hours of open water experience to become a fully confident, qualified diver; some say it takes 100. Only the individual can tell when he or she has achieved the level of a qualified diver: There is a special feeling of confidence that develops.

Because of the limitations of the basic open water course, the major scuba training associations of the U.S. have developed a two part educational system—the basic open water course and the advanced diver training course. Each association has its own names for these programs, but they are primarily the same concept.

Why not just one giant, comprehensive course that encompasses both basic and advanced training? Because it is impractical and runs against the grain of consumer acceptance. It has been tried and rarely works, except for a few isolated college and university programs.

Most people interested in learning scuba want to “try it before they buy it.” They are seeking a brief, inexpensive introduction prior to making a major investment. The basic open water scuba course fulfills this desire and starts them on the right road to diver safety.

Advanced diver training is where it's at. This is where people really begin to learn and refine their diving skills as well as acquire an appreciation and an enjoyment for the U/W world.

Beyond advanced diver training there is a smorgasbord of specialty courses including: U/W photography; equipment maintenance; U/W rescue; search and recovery; U/W navigation; night, wreck, cavern and lobster diving—and more.

The trend toward advanced diver training is clear cut. SKIN DIVER Magazine conducts a national survey of its readers every two years and we have found the popularity of advanced diver training and specialty courses is mushrooming. In each survey the magazine has asked how many of its readers have received advanced diver training. The results speak for themselves:

Advanced Diver Certification

1987	56.1 percent
1985	43.8 percent
1983	37.5 percent
1981	21.2 percent

Advanced diver training and certification among SKIN DIVER Magazine readers has almost tripled in seven years! During the next five years we believe almost every new diver will enroll in some type of advanced diver or specialty diver training course.


Why the dramatic shift toward this type of training? Two reasons: First, the diver training associations all agree that continuing education is the key to safety. It is the most effective way to reduce diving accidents. Second, there has been a fairly recent explosion of advanced training programs, books, manuals, trips, learning aids and so on.

Today's new diver is blessed with a very wide selection of advanced and specialty training options. These programs have been made available at local dive stores, at tropical resorts, aboard local boats and long range live-aboards.

A new diver can enroll in a straight advanced training course or select a specialized program in night diving, wreck diving, marine identification, cave diving, deep diving, etc. There is no end to the programs being made available.

Another significant trend in advanced diver training is that such courses have now become fun. In fact, advanced diver training is a lot more fun than basic diver training. The emphasis is on skill and knowledge rather than survival.

Getting back to the original question of how long it takes to become a qualified diver, the answer is, “a lot longer than the duration of a basic open water course.”

The quickest and easiest way to achieve the level of a qualified diver is to enroll in an advanced training program. You can get much more enjoyment out of diving by acquiring the knowledge and skills for true appreciation of this wonderful sport. 

How long? How long does it take to become a qualified diver? This is the question asked by every neophyte who has just enrolled in a scuba class. The question is disarmingly simple, but the answer is complex.

The answer to this question can range from two weeks to two years. A lot depends on such factors as environment, geographic location, water conditions and dive skills involved. For example, California kelp diving is more strenuous than a leisurely cruise through the shallow coral reefs of Pennekamp Park. Diving in the frigid 39°F water of Puget Sound requires more training than diving in the 80°F waters of Grand Cayman. Wreck diving in the cold, murky depths of the Great Lakes requires far more skill and experience than exploring a shipwreck off Ft. Lauderdale. And, diving the shipwrecks off the New York/New Jersey coast may be the toughest of all.

One thing can be said for sure. A person graduating from a basic open water scuba course is not a fully qualified, self-sufficient diver. Basic certification is not the end—it is the beginning.

A person who completes basic open water training has learned the theory of diving through classroom lectures and discussions. He/she has been taught the safe handling of scuba gear in pool practice and has been introduced to open water diving. This kind of course was never intended to make a person fully qualified. It is a launching point on a course toward

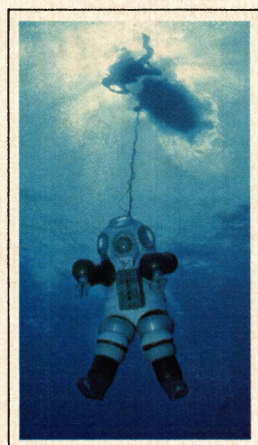
It's Maui. A woman hangs suspended in the Pacific depths. Eye to eye with the great humpback whales of Hawaii.

She holds her space. Intent. Unflappable. Dr. Sylvia Earle never turns from a challenge.

Marine biologist. Oceanographer. Botanist. Dr. Earle led America's first team of women aquanauts. Leadership has been her lot ever since.

She has directed or participated in more than forty expeditions. Few have exceeded her record of five thousand hours under waters as diverse as the Pacific Ocean and the Red Sea.

But not all her fame has been achieved submerged. She has lectured in thirty countries.



Descent off Hawaii in the JIM diving suit.

Written more than fifty articles. Authored the National Geographic book, *Exploring the Deep Frontier*.

Though she embodies the adventurer spirit, Dr. Earle is equally committed to the preservation of the seas. And ardent in her defense of all life within them.

Today, she searches out methods of ocean conservation.



Inside Deep Rover, undersea vehicle.

Aquanaut Sylvia Earle probes earth's other space.

Rallies support for the endangered whale. Catalogs unknown underwater life. Creates devices to explore virgin sea worlds.

That she relies on a Rolex is

not unexpected. Dr. Earle asks no less of her timepiece than she does of herself. Performance must be predictable in unpredictable circumstances. And high purpose must always be artfully executed. The accomplished make no compromise with excellence.



Confrontation with a Humphead Wrasse in the Red Sea.



Submariner Oyster Perpetual Date in stainless steel and 18kt gold.

Write for brochure. Rolex Watch U.S.A., Inc., Dept. 291, Rolex Building, 665 Fifth Avenue, New York, New York 10022-5383.

© 1985 Rolex Watch U.S.A., Inc.


ROLEX

Submariner, Oyster Perpetual Date are trademarks

circle #105 on Reader Service Card

Diver's Calendar

MADISON FILM FESTIVAL

Four Lakes Scuba of Madison, Wisconsin and Hoofers Scuba will host their second annual film festival **October 3** at the Sheraton Hotel in Madison.

For more information contact Four Lakes Scuba Club, P.O. Box 6112, Madison, WI 53716 or Jane Dwyer (608) 271-6255 or (608) 274-4443. ✂

DIVERS FLEA MARKET

The Southampton Submersibles will sponsor a Divers Flea Market **October 4** in the gymnasium of Long Island University's Southampton campus.

For information contact Valerie Philbrick, c/o Southampton Submersibles, Long Island University, Southampton, NY 11968; (516) 283-4000, ext. 140. ✂

VIRGINIA WATER RESCUE SAFETY COURSE

The Office of Emergency Medical Services, the Virginia Beach Underwater Recovery Dive Team and the London Bridge Volunteer Fire Department (all in the Virginia Beach area) will host a water rescue training course entitled Public Safety Scuba Instructors **October 5-10** in Virginia Beach, Virginia.

For information contact Sherman Morrison at (804) 491-1269 or the Office of Emergency Medical Services at (804) 428-6002. ✂

DIVE TO ADVENTURE '87

The Wet Set Dive Club of Beaumont, Texas will host its annual film festival and symposium, Dive to Adventure '87, at the Beaumont Plaza Holiday Inn **October 10**. The event finale is a film presentation by Jack McKenney.

For information contact Jim Brown, Wet Set Dive Club, c/o Davy Jones Locker, 3367 Plaza 10 Blvd., Beaumont, TX 77707; (409) 835-7010 or (409) 727-3681. ✂

SONOMA COUNTY DIVER RESCUE WORKSHOP

The 12th annual Sonoma County Diver Rescue Workshop will be held **October 10-11** at Santa Rosa Jr. College, Santa Rosa, California (Saturday) and Doran Beach Park, Sonoma County (Sunday).

For participant registration contact Janice Cockrell, P.O. Box 994, Fremont, CA 94537-0994. For staff registration contact Joan Bagniewski, P.O. Box 2792, San Rafael, CA 94912-2792. Enclose a self addressed stamped envelope (39¢ postage) with requests. ✂

BVI DAN COURSE

The Divers Alert Network will host a course on managing diving accidents and hyperbaric oxygen treatment **October 17-24** on Peter Island, British Virgin Islands. The course is for physicians, emergency room personnel, paramedics and nurses and is approved for 24 CME credit hours and 2.4 CEUS for paramedics and nurses. For information contact Cindi Easterling, P.O. Box 3108, Duke University Medical Center, Durham, NC 27710; (800) 222-9984 or 684-6485. ✂

U/W PUMPKIN CARVING

Water Education Training will hold its seventh annual Underwater Pumpkin Karving Kontest **October 19** at Kellogg Park in San Diego, California. There will be a night diving lecture before the event and a bonfire and barbecue afterward. For information contact W.E.T. (619) 693-DIVE. ✂

HAUNTED QUARRY DIVE/PARTY

The Aqua Amigos Scuba Club of Cleveland, Ohio will host its 11th annual Underwater Haunted Quarry Dive/Party at Nelson Ledges **October 24**. Camping is available. For information contact Carol Landis, 27500 Bishop Park, Wickliffe, Ohio 44092; (216) 585-2133. ✂

MIAMI SHELL AUCTION

The Greater Miami Shell Club will host its annual shell auction **October 28** at the Museum of Science, 3280 South Miami Avenue, Miami, Florida. For information contact Sandra Gayle Motes, 7305 NW 59th St., Tamarac, FL 33321; (305) 726-5190. ✂

CALIFORNIA DAN COURSE

The Divers Alert Network will present a diving accident management and prevention seminar **October 29-30** at Los Robles Regional Medical Center. The seminar is approved for physician and EMT credits.

For information contact Education Department, Los Robles Regional Medical Center, 215 West Janss Road, Thousand Oaks, CA 91360; (805) 379-5586. ✂

AAUS CONFERENCE

The American Academy of Underwater Sciences will host a conference entitled Coldwater Diving for Science at the University of Washington in Seattle, Washington **October 29-November 1**. There will be diving workshops and diving excursions to local sites after the conference.

For information contact Mike Lang, Department of Biology, San Diego State University, San Diego, CA 98128; (619) 265-4676. ✂

ARTIFICIAL HABITATS FOR FISHERIES

The Florida Sea Grant College Program will host the fourth annual International Conference on Artificial Habitats for Fisheries **November 2-6** at the Hyatt Regency/Knight Center in Miami, Florida.

For information contact Dr. William Seaman, Florida Sea Grant College Program, Building 803, University of Florida, Gainesville, FL 32611; (904) 392-5870. ✂

YMCA SCUBA CONVENTION

The eleventh annual YMCA Scuba Convention will be held at the Amberly Suites in Atlanta, Georgia **November 6-8**. A broad range of technical papers and sessions will be presented and a DAN accident seminar will precede the conference.

For information contact YMCA Scuba Convention, 6083-A Oakbrook Parkway, Norcross/Atlanta, GA 30093; (404) 662-5172. ✂

skin diver

STAFF

PAUL TZIMOULIS / V.P., Group Publisher, Photography/Marine Division
BILL GLEASON / Editor-Publisher
BONNIE J. CARDONE / Executive Editor
ART SMITH / Art Director
JIM R. WARNER / Managing Editor
LESLIE JACKSON / Asst. Art Director
JIM WALKER / Feature Editor
LEE ALEXANDER / Ad Service Coordinator
RANDALL RAY / Ad Service Coordinator
REBECCA L. THOMAS / Sr. Editorial Asst.
STEPHEN C. LIPRA / Data Analyst
GRACE M. RIVERA / Administrative Assistant
LOUISE AVILA / Publishers' Secretary
EDITORIAL FAX (213) 854-2866

CONTRIBUTING EDITORS

BILL BARADA / Environmental Editor
HILLARY HAUSER / Special Features Editor
JIM & CATHY CHURCH / Photography Editors
JACK MCKENNEY / Adventure Editor
E.R. CROSS / Technifacts Editor
GERI MURPHY / Special Assignments Editor
ELLSWORTH BOYD / East Coast Editor
GEORGE COZENS / Technical Editor
ALFRED A. BOVE, M.D. / Medical Consultant

ADVERTISING SALES

MARIO VALENZUELA / Los Angeles
DAN DORAN / Los Angeles
KEITH CLINE / Los Angeles
CAROLINE GANNON / Atlanta
BRENT O'BRIEN / Atlanta
JAN ROUSE / Atlanta
LINDA TAYLOR-LANDUA / Atlanta
MIKE WOOD / Atlanta
EDWARD MONK / New York
CAROLYN PASCAL / New York
SANDRA GONZALEZ-CHURCH / Chicago
KARIN BROCKMAN / Chicago
ROB REYNOLDS / Detroit

PETERSEN PUBLISHING COMPANY

ROBERT E. PETERSEN / Chairman of the Board
FREDERICK R. WAINGROW / President
ROBERT E. BROWN / Sr. V.P. Corporate Development
PETER F. CLANCEY / Sr. V.P. Nat'l. Advertising Director
JOHN DIANNA / V.P. Group Publisher, Auto Performance
THOMAS J. SIATOS / V.P. Group Publisher
PAUL TZIMOULIS / V.P. Group Publisher, Photo/Marine
ROBERT MACLEOD / Sr. V.P. Publisher
MILES KILLOCH / V.P. Publisher
PHILIP E. TRIMBACH / V.P. Financial Administration
JAMES J. KRENEK / V.P. Manufacturing
NIGEL P. HEATON / V.P. Circ. Mkt. Development
LEE KELLEY / V.P. Group Publisher, Auto Spec. Pub.
LEO D. LA REW / Treasurer/Assistant Secretary
MARIA COX / Director, Data Processing
BOB D'OLIVO / Director, Photography
CAROL JOHNSON / Director, Advertising Administration
BOB WEGELAND / Director, Direct Marketing Division
DON MGLATHERY / Director, Advertising Research
VERN BALL / Director, Fulfillment Services
HENSON LACON / Director, Subscription Sales
JAMES G. KILBOURNE / Director, Single Copy Sales
FAX (213) 854-2718; TWX (910) 490-2534

ADVERTISING OFFICES

LOS ANGELES

Ralph Panico, Western Advertising Director
8800 Santa Monica Blvd., Third Floor
Los Angeles, CA 90069; Phone (213) 854-2222

NEW YORK

Charles E. Alexander, Eastern Advertising Director
Anthony Coelho, Branch Manager
437 Madison Avenue, 28th Floor
New York, NY 10022; Phone (212) 935-9150

DETROIT

Steve Flemion, Branch Manager
333 W. Fort St. Building, Suite 1800
Detroit, MI 48226; Phone (313) 964-6880

CHICAGO

Duane R. Placko, Midwestern Advertising Director
John Hancock Center
875 N. Michigan Ave., Suite 3131
Chicago, IL 60611; Phone (312) 222-1920

CLEVELAND

Dewey F. Patterson, Branch Manager
Three Commerce Park Square, Suite 605
23200 Chagrin Blvd.
Cleveland, OH 44122; Phone (216) 464-1522

ATLANTA

Terry L. Shiver, Branch Manager
Four Piedmont Center, Suite 601
Atlanta, GA 30305; Phone (404) 231-4004

DALLAS

Jeff Young, Branch Manager
800 W. Airport Fwy, Suite 201
Irving, TX 75062; Phone (214) 579-0454

PETERSEN MAGAZINE NETWORK

Ralph Panico/Western Advertising Director, Los Angeles
Charles C. Alexander/Eastern Advertising Director, New York
Duane R. Placko/Midwestern Advertising Director
Steve Flemion/Detroit Branch Manager
Dewey F. Patterson/Cleveland Branch Manager
Terry L. Shiver/Atlanta Branch Manager
Jeff Young/Dallas Branch Manager
Anthony Coelho/New York Branch Manager

Nikonos Technique

DEDICATED TO THE ART AND SCIENCE OF UNDERWATER PHOTOGRAPHY 1987 \$3.50

Become a better underwater photographer.

Let *Nikonos Technique Magazine* be your guide. It's the most spectacular instructional publication ever created on underwater photography. The world's top experts show you what equipment you'll need, and exactly how to use it. You'll learn about exposure, artificial light, composition, use of lenses and more. *Nikonos Technique* will take you from absolute beginner to advanced amateur with beautiful color photography every step of the way.

You'll discover how much fun it is to be able to capture on film those wonders you see in the depths. You'll see how much it will add to the rewards of your diving experience, because you'll have a greater understanding of the theories and techniques of underwater photography. You'll learn from the experience of professionals such as Frink, Frehsee, Roessler, and Doubilet. And with your improved photography skills, you'll be able to share the adventure of diving like never before.

Free poster if you order now.

A magnificent, color 36" x 24" reproduction of *Nikonos Technique's* wrap-around cover is yours free if you order now. Use the coupon below to send for your copy of *Nikonos Technique* and your free poster—and you'll be on your way to becoming a better underwater photographer.

Nikon®
We take the world's
greatest pictures.®



For your copy of *Nikonos Technique*
and your **free** poster,
send your check or money order for \$3.95*
(\$3.50 plus .45 for postage and handling) to:

Nikonos Technique
P.O. Box 519
Garden City, NY 11530-0519

Be sure to fill in your name and address below.

Name _____

Address _____

City _____ State _____ Zip _____

*Residents of the following states must add the appropriate sales tax for their state:
CA, CT, GA, IL, MD, MA, NY, TX, WA.

Nikon
ENV11117

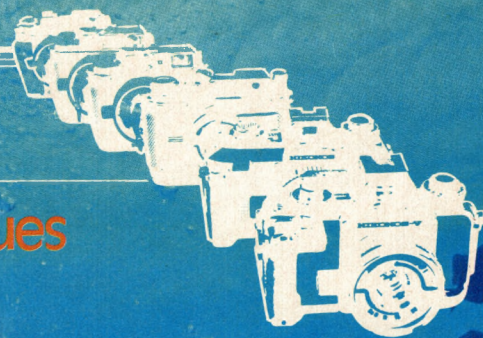
One year membership in the Nikon USA Club is free with every purchase when you submit the Nikon USA Club application. For further information write: Nikon Consumer Relations, Dept. N38, Nikon Inc., 19601 Hamilton Ave., Torrance, CA 90502-1309. © 1987 Nikon Inc.

SDM'S

Nikonos Photo Course

LESSON IX: Macro Shooting Techniques

TEXT AND PHOTOGRAPHY BY GERI MURPHY



Before we begin a discussion of macro techniques, you must preset the camera/lens controls. Once this is done, you will be in the "point and shoot" mode.

There are four controls that require pre-dive settings:

- 1) The ASA/ISO film speed
- 2) The shutter speed
- 3) The focus distance
- 4) The aperture

In addition to the camera/lens controls, you will also be setting your flash for a pre-determined distance.

FILM SPEED SETTING

The film speed setting is determined by the type of film you are using. For macro, this is only important if you use TTL flash, but it is a good habit to develop.

If you use color slide film, chances are your setting will be either ASA/ISO 50 or ASA/ISO 64. If you use print film, the setting will probably be ASA/ISO 100. Just make sure the film speed dial matches

the speed on the film cartridge.

SHUTTER SPEED SETTING

The shutter speed setting is dependent upon whether you intend using TTL or manual flash.

If you intend using TTL flash, on TTL mode, set the shutter speed dial on A for automatic. If you intend using manual flash, or a TTL flash on manual mode, set the shutter speed dial on 60 for 1/60th second shutter speed. This is the recommended shutter speed for sync with an electronic flash (strobe).

If you are experiencing problems with the camera's electronics, or the camera's battery is dead, you can switch to M90 for a mechanical shutter speed of 1/90th second. This setting will also sync with the electronic flash.

FOCUS SETTING

Setting the focus on the lens is the easiest adjustment you'll make. All extension

tubes and wire framers are designed to operate on a minimum focus setting. You simply adjust the lens focus control to the minimum focus distance on the scale: 2.75 feet for the 35mm lens or 2 feet for the 28.

APERTURE SETTING

The aperture setting is another simple and easy to remember adjustment. You will be doing all of your macro photography at a single setting—f/22.

Your camera lens will provide the maximum depth of field at f/22. This feature becomes especially critical in macro work because the addition of extension tubes severely reduces the normal depth of field of the lens. You will learn more about this shortly.

The important point to remember is all macro shots should be taken at an aperture of f/22. This way you obtain the sharpest and most rewarding macro photos.

FLASH DISTANCE

In normal underwater photography the flash is held at comparatively long distances, ranging from three to six feet. In macro photography the distance is drastically shortened, ranging from three to eight inches.

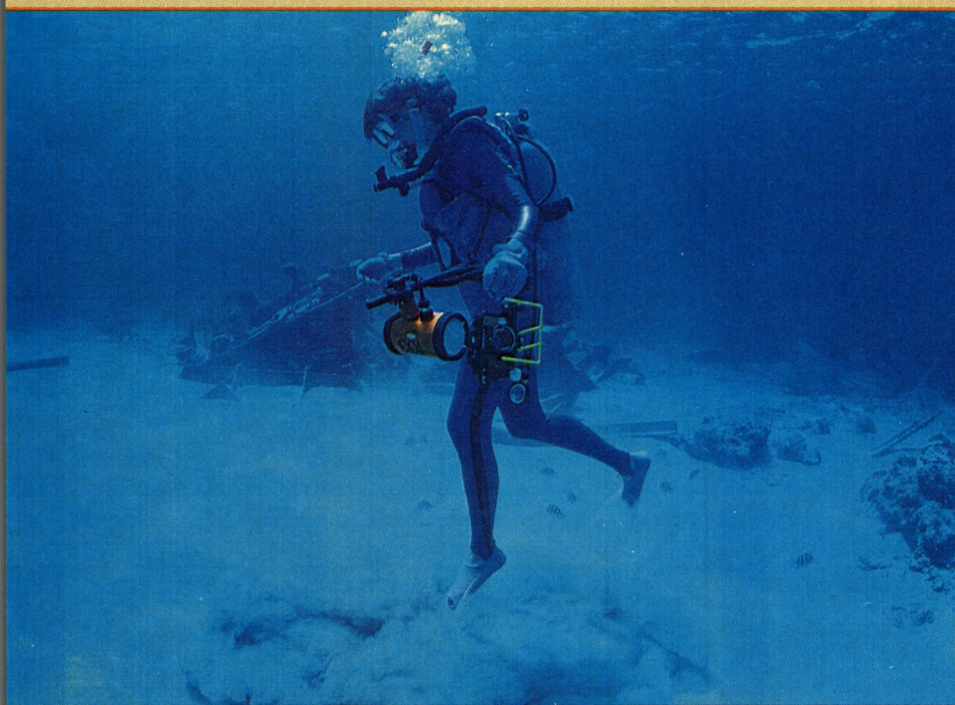
The addition of an extension tube means the small amount of light passing through the aperture must now travel farther to reach the film. One of the basic laws of physics is that light diminishes in intensity as it travels. Stars in the night sky are a good example of this physical law. One would hardly think those twinkling lights are gigantic balls of hydrogen fire many times larger than our own sun.

The length of the macro tube determines how much light is lost as it travels down the lens/tube assembly. The following is an approximate guide indicating the amount of lost light:

- 1:3 macro— $\frac{2}{3}$ f/stop
- 1:2 macro— $1\frac{1}{3}$ f/stop
- 1:1 macro—2 f/stops
- 2:1 macro—3 f/stops

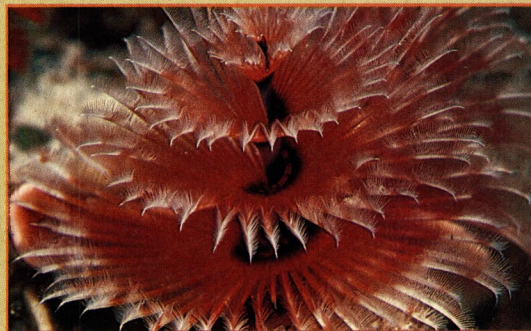
In order to compensate for this light loss, you must bring the flash very close to the subject positioned in the center of

Above, left: The macro photographer must take care not to stir up sediment with fins. Left: Stirred up sediment can cause severe backscatter. Below: This 1:1 macro shot shows limited depth of field. The left spiral is in focus while the right is fuzzy.



Opposite page: Preset camera controls allow a simplified "point and shoot" technique. The

subject should be centered in the framer with a one-quarter inch border between it and the wires. Sharp focus is achieved by placing the creature between the posts of the macro framer.



the framer. The normal f/stop exposure guide that comes with the flash will not work with extension tubes.

The distance from flash head to framer will vary, depending on four factors:

- 1) The size of the extension tube used
- 2) The power output of the flash used
- 3) The speed of the film used
- 4) The reflectivity of the subject

A typical macro flash distance setting might be eight inches for a 1:3 extension tube, SB-103 flash and ISO 50 slide film when photographing an arrowcrab of medium reflectivity. Many extension tube manufacturers provide flash distance guidelines with their tubes.

BASIC DISCIPLINES

The reason macro photography is easy to learn is the variables are reduced to an absolute minimum. Since all controls are preset, you can concentrate on the four basic disciplines of successful macro:

- 1) Focus and framing
- 2) Flash distance for exposure
- 3) Flash angle for picture mood
- 4) Camera angle for color background

Mastering these shooting techniques will result in sharp, well exposed macro pictures you will treasure forever.

FOCUS AND FRAMING

The macro framer is purposely oversized to allow for slight flexing and bending of the support wires. Always allow for an invisible one-quarter inch border inside the wire frame.

Position your creature or subject in the center of the wire framer whenever possible. Be careful never to touch or bump the creature with the framer. Such contact could either frighten or injure the creature you are trying to photograph.

Be careful not to press the framer against the reef or sea bottom. The wire framer is fragile. Any side or bottom pressure may cause it to bend and it will appear in your photos.

Owing to heavy diving use, these fragile wire framers may become twisted or bent. This is especially true with the larger, longer 1:3 framer. Periodically check to be sure the bottom of the framer is parallel to the bottom of the camera and that the corners of the framer are square.

DEPTH OF FIELD

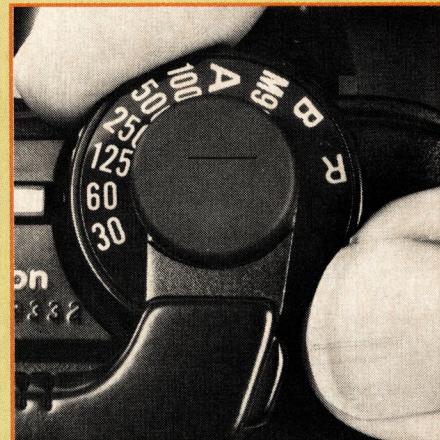
The precise point of sharp focus with a macro tube setup is on the outside edge of the wire framer. If you were to place the wire framer squarely against a newspaper lying on the bottom, the print would be in sharp focus.

The plane or position of sharp focus is extremely narrow with macro tubes. This range of focus is known as the depth of field. Depth of field for macro photography is extremely reduced. This is the price you pay for altering the focal distance of the lens.

Here is a depth of field guide for U/W



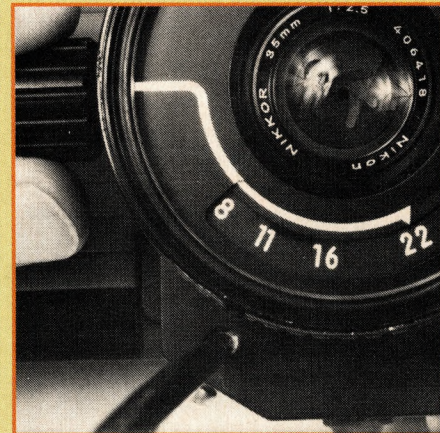
Step 1—Set ASA/ISO film speed dial.



Step 2—Set shutter speed dial.



Step 3—Set focus at minimum distance.



Step 4—Set aperture at f/22.



Left: Step 5—Set flash distance. The distance from flash head to framer will vary, depending on four factors: the length of the extension tube used, the power output of the flash, the film speed and the reflectivity of the subject. Many extension tube manufacturers provide flash distance guidelines with their tubes. Once you have all the camera/strobe adjustments set, you can concentrate on composition of your picture.

macro tubes at an f/22 aperture setting:

- 1:3 macro—1"
- 1:2 macro—1/2"
- 1:1 macro—1/4"
- 2:1 macro—1/8"

When shooting a 1:1 macro of a Christmas tree worm, only one of the twin gill plumes will be in sharp focus, even though the other is barely two-thirds of an inch away.

Sharp focus and framing require precise control over the camera and attached wire framer.

SAND/VISIBILITY CONTROL

The macro photographer must be firmly planted on the bottom with good con-

trol over buoyancy, surge or currents. He/she cannot aimlessly float above the reef, swaying to and fro or bobbing up and down.

The photographer should take extreme care not to stir the bottom up with his/her fins. A conscious effort should be made to hold the fins completely still and to move about the reef with the hands (for short distances, of course).

You may find it difficult to maintain precise framer control on shallow reefs during surge. Large, powerful surface waves will cause you and the camera to rock or sway back and forth. If surge occurs, move into deeper water where its effect will be reduced.

Free Lycra® skins when you buy a Nikonos-V.

Look like a million for free.

Your Lycra body suit is free when you buy a Nikonos-V body.

\$95 value. These bright, colorful "skins" are made from a durable, comfortable combination of Lycra and nylon.

Protection against chills or accidental coral scrapes. They're perfect for photographing in warm tropical water without a wet suit.

"Skins" are in. Good looking and practical, too. So lightweight they pack easily and can even be worn under wet suits for added thermal protection.

A great way to get started in underwater photography.

Start looking good in your Lycra body suit and start with the best underwater camera—the Nikonos-V. Then add the lens, flash, and accessories you want to build the system that's right for you.

By popular demand
Offer extended to
Oct. 31, 1987.

It's never been so easy to capture all those special moments that you'll treasure forever.

All the exciting, unspoiled beauty that only a diver sees can be captured easily on film with the Nikonos-V. The Nikonos-V offers revolutionary TTL (Through The Lens) auto flash exposure for great photographs every time. It has an extra large viewfinder for easier composition, the most accurate light meter ever in an underwater camera, and you even get a full range of manual shutter speeds for creative override.

Now enhance great underwater photography with great looks.

This free special offer is available from April 1, 1987 to Oct. 31, 1987.

See your Nikonos dealer now for the best there is in underwater camera equipment and details on your free Lycra skins.

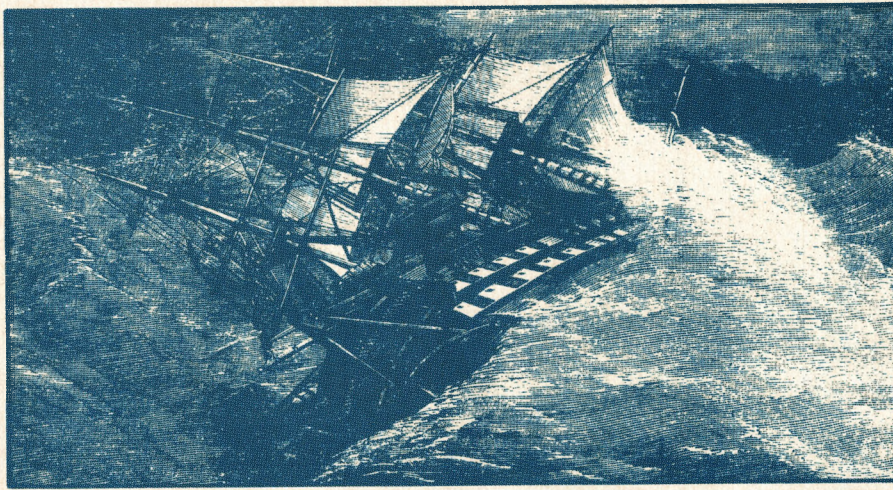


Nikon®
We take the world's
greatest pictures.®

Lycra is a registered trademark of the E.I. du Pont de Nemours & Company Inc.



One year membership in the Nikon USA Club is free with every purchase when you submit the Nikon USA Club application. For further information write: Nikon Consumer Relations, Dept. N88, Nikon Inc., 19601 Hamilton Ave., Torrance, CA 90502-1309. © 1987 Nikon Inc. circle # 107 on Reader Service Card



Wreck Facts

BY ELLSWORTH BOYD

I would like to thank George Feehley, Ocean City, Maryland for sending information about the discovery of an old wreck buried in the sand along the southern shores of Assateague Island. Assateague is a barrier island that begins south of Ocean City and extends 37 miles to Virginia. Workers from the Chincoteague National Wildlife refuge were clearing debris from the beach after a northeaster when they uncovered the remains of what appears to be a vessel built in the late 1800s. Some of the artifacts include planks with distinctive gilded scrollwork on them, metal, glass and timbers held together with wooden pegs instead of nails. Charlie Petrocci, U.S. Fish and Wildlife Service, speculates the wreck might be the USS *Despatch*, a 560

ton screw steamer that ran aground on Assateague in 1891. Petrocci is conducting research for positive identification of the wreck.

Ben Swenson, Atlanta, Georgia is interested in sunken treasure and wants to know where he might obtain maps and other information on the subject. There has been renewed interest in treasure, Ben, since Mel Fisher's exciting discovery of the *Atocha* a couple of years ago. I am sending you a copy of A Descriptive List of Treasure Maps and Charts in the Library of Congress. It includes lost and buried treasures as well as sunken ones. You can find books on the subject in your local library and bookstore.

Wait until you hear this story. You'll think I'm jesting, but believe me—it's true.

The 250 foot package freighter *Regina* sank in Lake Huron during a storm in 1913.



photo/courtesy Wayne Brusate

It is also another reason for divers to fight new laws by state and federal bureaucrats that would thwart sport divers' rights to search for sunken treasure. I am incensed at what the state of Florida did to Lynn Carlsen, South Elgin, Illinois.

Carlsen and his bride, Elizabeth, were not far from the beach on the outskirts of Key Largo where he was removing white conglomerate from cannonballs he had retrieved on an offshore wreck. Imagine Carlsen's surprise when a Florida Marine Patrolman arrested him for possession of coral! Carlsen tried to explain that it wasn't coral encrusting the cannonballs, but a bioclastic sand material that accumulates on submerged iron. The officer refused to listen, read Carlsen his rights, put him in a patrol car and took him in. Released on his own recognizance, Carlsen called David Horan, the famous Key West attorney who defended Mel Fisher when the State of Florida seized his treasure and kept it for seven years. (Horan finally won Fisher's case in the United States Supreme Court.) Horan's brother, Edward, took the case and contacted Judge Regan Ptomey in Plantation Key. He also had Carlsen, who returned to South Elgin, write to the judge and explain what happened.

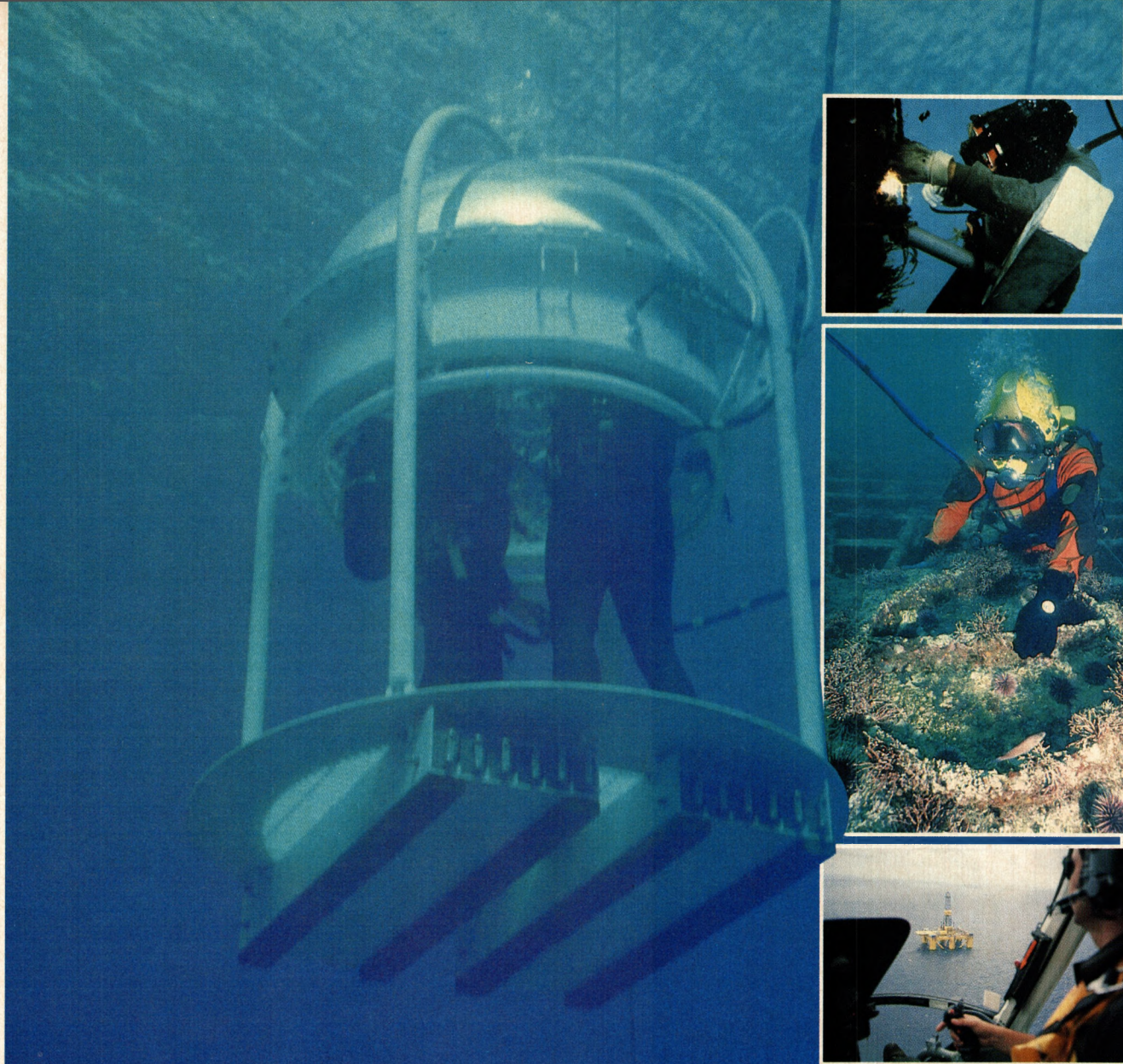
Carlsen is a highly respected Illinois school teacher with no prior criminal record. He owns property in the Keys and pays Florida property taxes. An experienced sport diver who respects the underwater environment, he has never removed a piece of coral from the reef. He has a meticulous method for preserving artifacts he displays at school where they provide motivation for history lessons.

To make a long story short, Judge Ptomey refused judgment on the matter and Carlsen was freed of the charges. When Carlsen contacted the Florida state attorney's office to get his artifacts back, he was told he hadn't been found not guilty, the judge had simply not taken any action in his case. He was also told the evidence would be returned to the sea "where it belonged."

Carlsen could have pled guilty and paid a \$100 fine, but he teaches honesty and integrity, knows he isn't a criminal and refused to be branded as one. His legal fees cost more than the fine and both Carlsen and his wife suffered mental anguish from this harrowing experience.

Wayne Brusate, Marysville, Michigan was as enthused as a child at Christmas when he discovered the 250 foot package freighter, *Regina*, 100 feet beneath the surface of Lake Huron. Gary Biniecki, John Severence and Brusate were searching for a tugboat with a new sidescan sonar when they targeted a large object on the bottom. Brusate found the ship's bell and rubbed off more than 70 years of silt to uncover the freighter's name engraved in brass. He says the

(Continued on Page 144)



If you like what you see up here, give us a chance to put you down there.

The Ocean Corporation is among the finest commercial diving schools in the world. We pioneered bell diver training, in-house welding training, ASNT level inspection diver training and Diver Medic certification. Our pride runs deep. Give us a call and see for yourself.

Remember, all commercial diving schools are not alike. Check them out. Visit the school if you can. Look for real commercial diving professionalism and reputation, adequate housing and living conditions. Ask the most important question: "How do you plan to help me get my first job in the commercial diving industry?"



The Ocean Corporation

5709 Glenmont Houston, Tx 77081 (713) 661-0033
Call Toll Free 1-800-321-0298 Collect in Texas

The new Suunto SME. Diving technology that keeps you up with the times.



Consoles also available with mechanical depth gauge.

Never has so much information been packed into one small package. Introducing the Suunto SME.

An ingeniously designed, computerized instrument that instantly displays the vital diving information you need to know.

For different preferences, the SME comes in two models.

The SME-USN is based on standard US Navy tables. While the SME-ML uses multi-level diving principles to calculate the amount of nitrogen absorbed and released from your body at specific depths.

Unlike current Navy tables that base time limits solely on maximum depth, the SME-ML's computer microprocessor monitors the amount of time spent at every depth during your dive. As a result, you're compensated for time at shallower depths, allowing you significantly longer no-decompression dives.

To see the SME, head down to your nearest SeaQuest dealer. And discover one diving breakthrough whose timing is perfect.



All gauges easily read from one position.

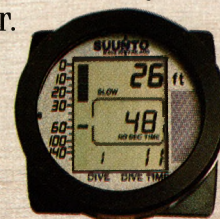


Dive profile memory holds up to 10 hours.

*Other Displays:
Excessive Ascent Rate,
Decompression Level, Return
to Decompression Level*

seaQuest®

SeaQuest, Inc.
2151-F Las Palmas Drive
Carlsbad, CA 92009
(619) 438-1101



*Display reads: 11 minutes into
Dive 1. Present depth: 26'.
Maximum depth reached: 60'.
Remaining no decompression
time: 48 minutes. Ascent rate
must be slowed.*

Scuba Quiz

Category: Equipment

Topic: BC Use By Dennis Graver

No other item of diving equipment has developed as much as the buoyancy compensator in the past 20 years and its use is recommended for all scuba dives. There are many different types and configurations. See if you know all you should about the use of this important item of equipment. Test your knowledge with this month's quiz, then compare your answers to those found on the following page.

1. The purpose of a buoyancy compensator (BC) is to:

- ☐ A. Provide positive buoyancy at the surface
- ☐ B. Maintain neutral buoyancy underwater
- ☐ C. Allow the diver to wear extra weights
- ☐ D. A and B, but not C

2. The BC low pressure inflation hose should be connected to the BC:

- ☐ A. Before turning on the air
- ☐ B. After turning on the air
- ☐ C. While depressing the low pressure inflator valve
- ☐ D. When the hose is attached makes no difference

3. Which of the following statements concerning oral inflation of the BC is false:

- ☐ A. Oral inflation is necessary when the air supply is too low for the diver to breathe
- ☐ B. Oral inflation is necessary when a BC is not equipped with a low pressure inflator
- ☐ C. Oral inflation is necessary when the low pressure inflator is malfunctioning
- ☐ D. Oral inflation in the water should take place with the mouth beneath the surface

4. Arrange in order the following responses for a low pressure inflator valve that sticks in the open position:

- ☐ A. Swim down hard, invert and vent excess air
- ☐ B. Flare to slow ascent if unable to control buoyancy
- ☐ C. Disconnect the low pressure inflator hose
- ☐ D. Hold onto a secure object on the bottom

5. When descending, air should be added to the BC

- ☐ A. In small amounts throughout the descent
- ☐ B. When the descent cannot be slowed by swimming
- ☐ C. When the diver reaches the bottom
- ☐ D. To nearly offset excess weight

6. Match the following:

- _____ A. Coarse buoyancy control
- _____ B. Medium buoyancy control
- _____ C. Fine buoyancy control
- 1. BC volume
- 2. Amount of weight worn
- 3. Lung volume

7. To activate a CO₂ detonator on a BC, the diver should pull the cord:

- ☐ A. Straight down
- ☐ B. Down and to the right
- ☐ C. Down and to the left
- ☐ D. Down and to the right and left

8. When venting air from a BC underwater, the inflator valve mouthpiece should be:

- ☐ A. Held above the head with the mouthpiece pointed up
- ☐ B. Held above the head with the mouthpiece pointed down
- ☐ C. Held at shoulder level with the mouthpiece pointed up
- ☐ D. Held at shoulder level with the mouthpiece pointed down

9. When at the surface, a diver should have:

- ☐ A. No air in the BC
- ☐ B. The BC partially inflated
- ☐ C. The BC more than half inflated
- ☐ D. The BC nearly fully inflated

10. For surface swimming, the BC should be:

- ☐ A. Deflated
- ☐ B. Partially inflated
- ☐ C. Fully inflated
- ☐ D. B or C, but not A

11. Arrange in order from least BC use to most BC use the following diving situations:

- ☐ A. Neoprene drysuit, undergarments, excess weight
- ☐ B. Fabric drysuit, undergarments, excess weight
- ☐ C. Fabric drysuit, undergarments, neutral weighting
- ☐ D. Wetsuit, neutral weighting

12. Complete: The amount of weight for diving without a wetsuit should be:

- ☐ A. The same amount used with a wetsuit
- ☐ B. Greater than the amount used with a wetsuit
- ☐ C. Less than the amount used with a wetsuit
- ☐ D. Much less than the amount used with a wetsuit

13. Which of the following situations will require the most adjustments of buoyancy during a dive in which depth varies:

- ☐ A. A neutrally weighted diver with no exposure suit
- ☐ B. A neutrally weighted diver with an exposure suit
- ☐ C. An overweighted diver with an exposure suit
- ☐ D. An underweighted diver with an exposure suit

Scuba Quiz

Answers: BC Use

1. D. A and B, but not C. The goal of diving is to be neutrally buoyant at all times when underwater. To the extent that a diver can offset a loss of buoyancy caused by suit compression or by small items collected during a dive, it is acceptable to use a BC to offset negative buoyancy. Use of the BC to create a "human lift bag" for salvage or to compensate for overweighting is improper.

2. A. Before turning on the air. It is much easier to connect the low pressure hose to the BC if it is done before the tank valve is opened. It can be done if the air is on but, if you forget, depressing the inflation valve while attaching the hose will make the task easier.

3. A. Oral inflation is necessary when the air supply is too low for the diver to breathe. This is incorrect. Less air pressure is required for the low pressure inflator valve to function than for the regulator to work. Until you have established buoyancy and your mouth is above water, oral inflation should be done with the mouth beneath the surface.

4. C, A, B, D. If a low pressure inflator sticks, disconnect the supply hose as quickly as possible and start swimming toward the bottom at the same time. Upon reaching the bottom or descending about 15 feet, invert and vent the BC. If still too buoyant, flare out to increase your cross-sectional area as you ascend. Have the inflator valve serviced as soon as possible.

5. A. In small amounts throughout the descent. Negatively buoyant descents are dangerous, especially in deep water. Good divers are neutrally buoyant at all times when underwater. When an exposure suit is worn, it compresses during descent, so air should be added to the BC in small amounts to maintain neutral buoyancy.

6. 2-A, 1-B, 3-C. Weighting sets primary buoyancy and the air in the BC is the secondary control. Good divers use breath control to make minor buoyancy adjustments—higher average lung volume to increase buoyancy, lower average volume to reduce it. This fine control of buoyancy is not possible until both the primary and secondary means are handled properly.

7. D. Down and to the right and left. If a CO₂ mechanism is to be effective, it must be carefully maintained and activated properly. The cartridge may not be punctured by simply pulling down on the cord, but pulling down and side to side will activate the cartridge if it is going to activate at all. Many experts in diving regard CO₂ mechanisms as undesirable accessories.

8. D. Held at shoulder level with the mouthpiece pointed down. It is easiest to control buoyancy during an ascent by holding the BC deflator valve open at shoulder level with the mouthpiece pointing down, raising the mouthpiece until the air just begins to escape, and holding the valve in that position throughout the ascent. To regulate buoyancy, elevate the mouthpiece slightly to reduce lift or lower it slightly to increase it.

Have you been using your BC correctly? Did you discover some new skills to try as a result of this quiz? There were two thoughts I wanted to convey with this topic: (1) That diving with excess weight is dangerous and increases the difficulty of diving, and (2) That buoyancy control is probably the single most important skill a diver can possess. There is much more to buoyancy than pushing buttons to descend and ascend. If you picked up a tip or two from this quiz, imagine the techniques you can learn in an advanced course.

9. B. The BC partially inflated. A good diver is always neutrally buoyant underwater and is always positively buoyant when at the surface. Establishing positive buoyancy should be an automatic response upon surfacing. Only enough air is required in the BC to support the head out of the water.

10. D. B or C, but not A. When swimming face down, the BC should be only partially inflated. Too much air in the BC tends to make the diver roll over and increases the effort needed to swim. An exception to this rule occurs when divers with back-mounted units swim on their backs. In this instance, full inflation of the BC is appropriate.

11. D, C, B, A. The more material there is to compress and the greater the amount of weight worn, the greater the effort required to control buoyancy. The hardest configuration for buoyancy control is a foam neoprene drysuit with undergarments. Some divers further complicate this situation by wearing more weight than is required, creating a dangerous configuration.

12. D. Much less than the amount used with a wetsuit. Buoyancy stems from displacement of water. A wetsuit displaces much more water than the suit itself weighs, so lead weights are needed to offset the lifting force. Very little weight should be needed by a scuba diver if no wetsuit is worn.

13. C. An overweighted diver with an exposure suit. An overweighted diver must add more air to the BC than one who is properly weighted. The greater the amount of air in the BC, the greater the change in its volume as depth changes. Since buoyancy is really displacement of water, the changing volume results in changing buoyancy.

Gorgeous gauges.

As colorful as the rest of your gear.



You'll be glowing when you see the choices of vivid colors for Sherwood Sigma System™ combo boots. Passionate pink. Lovely lavender. Brilliant yellow. Deep-sea blue. And elegant black. All design-matched to your other colorful Sherwood gear.

Colors aren't your only selection, however. Start out with any combination of gauges. The modular boot design lets you change instruments as your needs grow.

Dive with confidence in colorfully coordinated Sherwood gear. Available at professional dive stores throughout the world.



**SHERWOOD
SCUBA**
Lockport, NY 14094 U.S.A.
A DIVISION OF **harsco**
CORPORATION

Combo boots include dive slate. Optional knife system also available.

Sherwood's

got you

Colorfully **covered.**



Diving Medicine

BY ALFRED A. BOVE, M.D., PH.D.

Last month we discussed diving and alcohol. The subject of this article is cigarette smoking and diving.

There are numerous diseases produced by cigarette smoking, among them atherosclerotic injury to blood vessels, cancers of the lung and mouth, problems with lung structure—such as emphysema—and damage to the arteries supplying the heart that ultimately produces heart attacks. These complications are the results of many years of cigarette smoking. In addition, smoking also changes the circulation in ways that can reduce physical conditioning.

Smoking itself is known to cause an increase in blood pressure and heart rate. It is likely owing to the inhalation of nicotine or similar products that have direct effects on the nerves that regulate the heart and blood vessels. Cigarette smoke also irritates the upper airways, causing spasm and excess mucus secretion. This can cause local plugging of small airways and make some segments of the lung difficult to empty normally. Smoking has both long and short term consequences and these can affect your diving.

SMOKING AND THE LUNGS

Long term cigarette smoking has several detrimental effects on the lungs. For those who have inherited abnormalities of certain enzymes, smoking produces rapid damage to the lung tissue and results in severe emphysema. For those with emphysema, diving is dangerous. This implies the lung tissue is damaged, that there are large pockets of air spaces (blebs) and a high likelihood of pneumothorax. Most individuals who develop emphysema related to cigarette smoking are in poor physical condition and in poor health and are not capable of withstanding the physical activity and pressure variations that are present with diving. The physical activity alone required for diving would severely overload a person with emphysema and make it difficult for him/her to dive. Also, the fragile structure of the damaged lungs would make the emphysemic diver highly prone to pneumothorax or other lung injury.

An alternative effect of smoking on the lungs is irritation of the airways. Mucus secretion and airway spasms can become chronic and result in chronic nar-

rowing of the airways with air trapping. Individuals with this type of lung injury are prone to air embolism because the lung cannot empty properly. Many smokers have irritated airways and some evidence of narrowed or blocked airways. In many cases, individuals with chronic airway obstruction have severe lung injury and lung disease, are in poor physical condition and cannot withstand the activity required for diving. If these individuals do manage to dive, the air trapping associated with obstructed airways makes it highly likely they will develop some form of pulmonary barotrauma, which can include pneumo-



thorax, mediastinal emphysema, subcutaneous emphysema or air embolism.

The immediate effect of smoking is some irritation of the airways. This produces excess mucus secretion and the possibility of airway spasm. Both of these can cause local air trapping and increase the risk of pulmonary barotrauma and air embolism. It seems reasonable for divers to avoid cigarette smoking before diving and not to smoke until diving is over for the day. Best of all, divers who smoke should stop smoking.

Another important effect of smoking is on the incidence of lung cancer. It is sad to see individuals with a history of smoking find upon retirement that they now have lung cancer and their life expectancy is significantly reduced. This is a serious, frequent and devastating complication of smoking. Encountering only a few tragic stories of lung cancer related to smoking and talking with the victims should make most people give up ciga-

rettes. Unfortunately, this experience is withheld from most of us and the dangers of cigarettes are never expressed.

SMOKING AND THE BLOOD VESSELS

Smoking has a double punch because it not only causes immediate and long-term damage to the lungs but also affects blood vessels. Recent research has demonstrated that smoking causes spasm of the blood vessels of the heart and reduction of the blood flow to it. This results in oxygen starvation and, in itself, can lead to further damage or injury to the heart.

The long-term effects of cigarettes are on the process of atherosclerosis. People who smoke for long periods (15-20 years) have a very high incidence of coronary artery disease and the consequence is a heart attack, sudden death or chest pain related to heart abnormalities. These occur because cigarettes seem to increase the speed of damage to blood vessels. The result is that these vessels narrow to the point where they become occluded and cause heart attacks. The exact mechanism whereby cigarettes interact with the blood vessels to cause this disease is not well understood, but statistically, from many epidemiologic studies, it is clear the relationship between cigarette smoking and blood vessel disease exists. Individuals with severe blood vessel disease from smoking or other causes are at high risk for cardiac complications during diving. This occurs primarily because of environmental stresses such as exercise and cold, which increase the work the heart must do. When the blood vessels are narrowed, the increased oxygen demand coupled with inability to supply adequate oxygen bearing blood, can be serious or even fatal. Individuals with known coronary artery disease should not dive. On the other hand, occasional exceptions can be made in individuals who have been treated by one of the techniques to repair the blocked arteries.

The immediate effects of cigarette smoking are somewhat different. In general, the constriction of blood vessels that occurs immediately upon smoking can reduce the blood supply to the heart and cause it to work improperly. This would be most apparent during periods of stress when the heart has to work harder.



aqua•vox /'ak-wə-voks/
n. (Latin) water + (Latin)
voice. **1.** Device attached to
SCUBA second stage regula-
tors using only the power* of
the human voice. **2.** A sim-
ple** impedance matching
device able to conduct
sound vibrations in air and
transfer them into water
without great energy loss.
3. Trademark of low-cost***
acoustic underwater com-
munications device devel-
oped in 1987.

**COMING
IN
NOVEMBER!**

*** No electronic
components
to corrode.**

**** No moving
parts.**

***** Under \$100.**

P. O. BOX 612, CAPE CANAVERAL, FL 32920



The effect of cigarettes on the heart would limit the heart's action and make it difficult to achieve a maximum level of exercise. Constriction of other blood vessels, such as in the hands, can result in cold complications to the fingers. The constriction of other blood vessels to the muscles can change the intake of nitrogen to the tissues and make a diver more prone to decompression sickness (bends) than if no cigarettes were smoked prior to the dive.

Another important effect of smoking is the change in the ability to breath normally and to deliver oxygen and blood to the muscles and skin because of constriction of these vessels. If heavy exercise is needed while diving to avoid a dangerous situation, the person who has recently smoked may not have the same capacity to exercise as someone who has not. In this case, the reduction in exercise capacity can be detrimental. Again, this is a result of cigarette smoking.

There have been several reports recently that described divers having heart attacks while underwater. Heart attacks are caused by progressive narrowing of arteries that supply the heart. They get so narrow that a blood clot forms and occludes the vessel completely. From statistical data and some recent experimental studies on small groups of patients, it has become apparent that smoking is a major factor in the damage to blood vessels, especially to the heart.

Coronary artery disease is progressive and may be undetected for many years because the narrowing is not critical enough to produce any symptoms. As damage to the blood vessels progresses and the blockage becomes more severe, the victim will experience tightness or pain in the chest during exercise. However, many individuals do not exercise heavily enough to experience any of this discomfort. They may have undetected damage to the blood vessels and yet can compromise the function of the heart under heavy work loads. The immediate effect of cigarette smoking is to cause constriction of these blood vessels and further aggravate the inadequate blood flow to the heart. Now, this individual enters the water to go diving. Perhaps the water is cold and produces stress on the circulation and the heart or the diver gets nervous or excited or has a surge of adrenalin that stimulates the heart to overwork. Or, the diver may need to swim hard to overcome a current or to extricate himself/herself from a situation that might otherwise be risky. Putting these factors together—the overload on the heart, the narrowing of the blood vessels from the recently smoked cigarette and cold water causing constriction of vessels—adds up to a critical reduction of blood flow and vital oxygen to the heart. The end result is a blood clot forming in a narrowed vessel and a heart attack underwater. Some-

(Continued on Page 146)

HENDERSHOT

Striking Lycra® Hot Skins at
your dealer. **NOW!**

HENDERSHOT AQUATICS, INC.
1 Whitall Ave., Millville, NJ 08332
609-825-4771

Lycra®/DuPont circle #110 on Reader Service Card

Octopus Ecstasy

AN ENCOUNTER OF RAPTUROUS DELIGHT



TEXT AND PHOTOGRAPHY BY GERI MURPHY

There is perhaps no greater thrill than a diver's first encounter with the wily octopus. There are about 150 species of octopuses and they live in almost all the seas of the world. They range in size from only a few inches in length to the giant Pacific Northwest species that grows up to 16 feet long. The species seen by most divers, however, is the common reef octopus that is 6 to 18 inches long.

While prized as a delicacy by many foreign societies, the octopus has become a cherished friend to most American sport divers. Here is a sea creature of exotic form, fascinating behavior and compara-

tively high intelligence.

Most divers are likely to encounter their first octopus during a night dive. This creature spends most of the daylight hours resting in a small coral cave, rocky crevice or other cozy hiding place. Octopus frequently inhabit shipwrecks because these afford many nooks and crannies for protection. Some of these marvelous creatures are so clever as to crawl into their holes and block the entrance with a stone, piece of coral or a shell.

Come nighttime, however, the octopus is on the prowl. A nocturnal creature by nature, it spends the evening exploring the reef and hunting for food.

The octopus' form makes it one of the most fascinating creatures for a diver to observe. The soft, sack-like form that droops past the eyes is sometimes mistakenly thought to be the head, but is in fact the body.

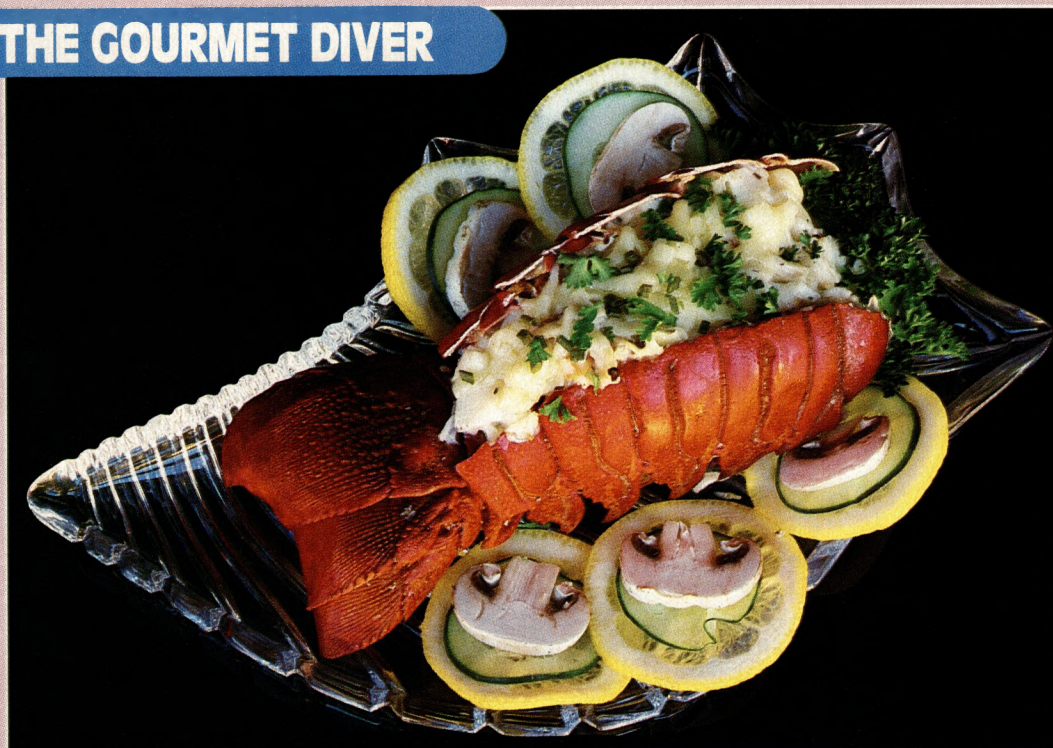
Protruding from the head like little doorknobs are a pair of eyes. Able to see in all directions, octopus eyes are highly developed and similar to those of humans. The pupil is a striking black bar across the center and tends to remain on a horizontal plane regardless of body position.

The body is covered with an envelope of what appears to be wrinkled skin, known as

(Continued on Page 54)



Top: When agitated, the octopus' skin becomes rigid and little wart-like horns project from it. Above: The octopus' pupil is a striking black bar. Right: When angered, the octopus turns red. Far right: Making friends takes gentle patience.



food stylist/Molly J. Kelly

BUG FEVER ANTIDOTE:

PANULIRUS INTERRUPTUS

TEXT AND PHOTOGRAPHY
BY BONNIE J. CARDONE

For the unafflicted, bug fever is hard to understand. Here in California it often involves overnight travel to a miles-away Channel Island aboard a charter dive boat. While you sleep, the boat chugs to its destination. Early the next morning, you rouse yourself from a warm bunk to gear up in the cold, pre-dawn darkness. Then you sit on the deck of the moving boat—with all your equipment on, even tanks—listening to the diesels mutter and trying to stay out of the wind. Of course, you must stay strategically close to the gate, so that once the boat is anchored you will be first in the water and, theoretically, the first to find and grab a crustacean known as *Panulirus interruptus*.

And, that's just the beginning. Those with the worst cases of bug fever will make five to six dives a day in water that is considered "warm" when it reaches 64°F. They will dive again and again, even if they never see a lobster. And, instead of discouraging, finding legs and antennae left

over from someone else's successfully bagged bugs will only fuel the fever.

I have never suffered from an extreme case of bug fever as described above. But don't misunderstand, I do love the lovely critters and never more so than when they've been steamed (fresh, not frozen) and dipped in butter. There's also the excitement of the hunt and the thrill that comes from catching one of these crafty crustaceans.

And, crafty they are. My dad would never believe that a lowly lobster could learn to avoid divers. But, no one who

has observed antennae retreating as rapidly as he/she finned closer would doubt this. And, at San Clemente Island, known as "land of the shorts" and the "lobster nursery" the little critters will actually jet out of their cracks and crevices for parts unknown as divers approach. They are well acquainted with us and our intentions. Thus the need to travel to far-off places. The easiest lobster to catch is the one that has never seen a diver before.

Panulirus interruptus, the spiny lobster, is found all along the California coast south of Point Conception and

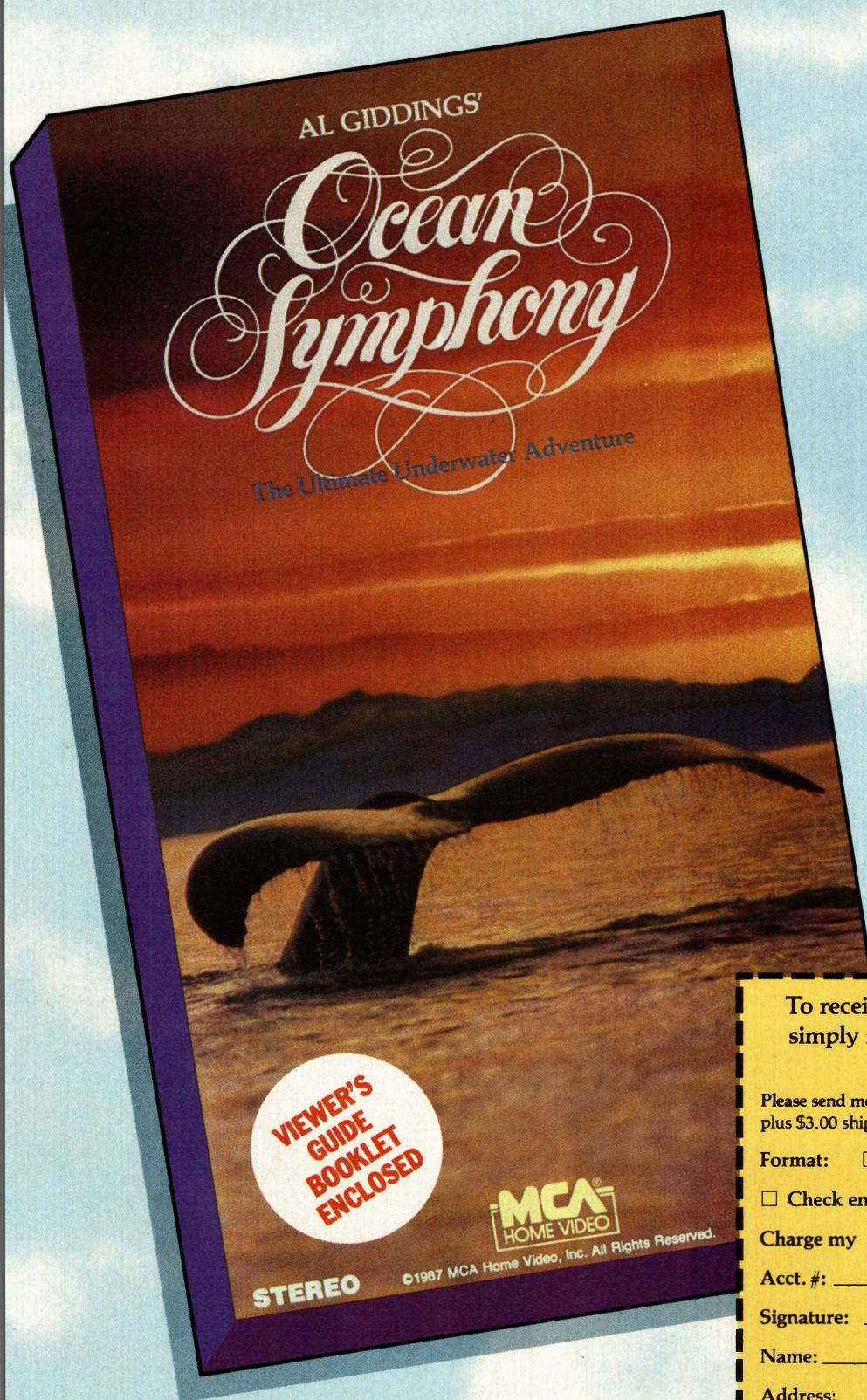
around all eight Channel Islands. Fish and Game very strictly regulates its take. In Southern California the season runs from the first Wednesday in October through the first Wednesday after the 15th of March. Lobsters may be taken only by hand; no sort of hooked device may be used and it is unwise even to have such a device on board a boat in bug diving season as Fish and Game wardens may misconstrue its purpose. The bag limit is seven and the size limit—measured from the rear edge of the eye socket to the rear edge of the body shell—is three and one-quarter inches. Bugs may be brought to the surface for measurement but it is illegal to bring shorts on board a boat or ashore. Do not detach the heads from the tails while at sea: Fish and Game wardens need to see the whole lobster to determine if it is of legal size. Last but not least, bug divers 16 years of age or over must have a California fishing license. These are available at sporting goods stores, the landings

(Continued on Page 42)

Seeing this many antennae in one spot will cause bug fever in susceptible divers. These bugs, however, live in a marine preserve.



Embark On The Ultimate Underwater Adventure.



Now you can probe the undersea wonders of the world with **Al Giddings' *Ocean Symphony*** from MCA. It's a tour de force film from the Emmy award-winning cinematographer who has spent 25 years and over 20,000 hours under the sea, recording the most dramatic and riveting scenes of ocean life.

From the ice-strewn waters of the hostile Antarctic to the coral-colored streams of the Caribbean, *Ocean Symphony* is a harmony of great undersea adventures set to a haunting original score. It features 11 breathtaking segments that cover everything from the magnificent Killer Whale to the intricate undersea tapestries of Anemones, Coral and Jellyfish.

So, take the plunge and order your copy of this exciting new videocassette today.

\$29.95



To receive Al Giddings' *Ocean Symphony* simply fill out this coupon or call toll-free 1-800-972-5858 Ext. 224

Please send me _____ copies of *Ocean Symphony* @ \$29.95 each plus \$3.00 shipping and handling. (In CA, IL, NY, TN add sales tax.)

Format: ☐ VHS ☐ BETA

☐ Check enclosed for \$_____.

Charge my ☐ MC ☐ VISA

Acct. #: _____ Exp. Date: _____

Signature: _____

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

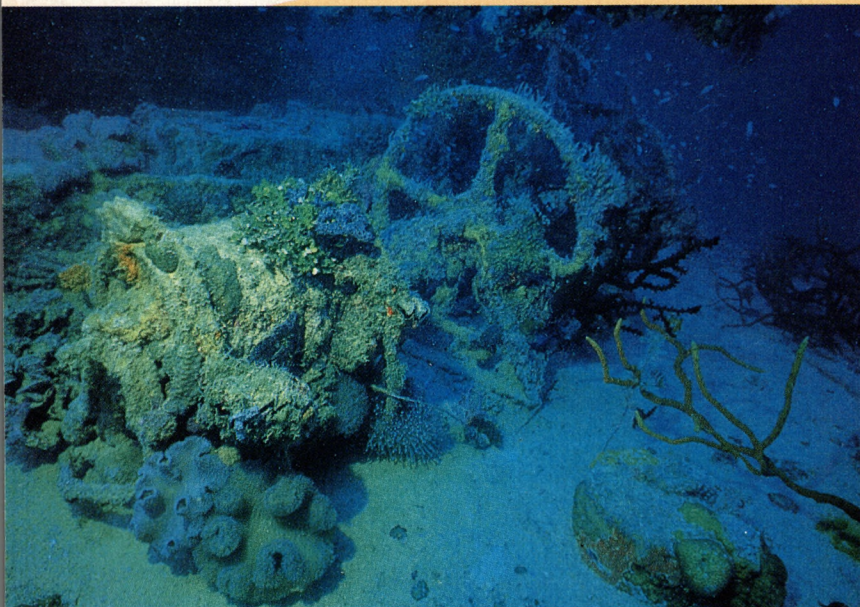
Telephone #: _____

Make checks payable to: MCA Home Video. Please allow 3 to 5 weeks for delivery. MAIL TO: *Ocean Symphony* Offer, P.O. Box 708, Northbrook, IL 60065.

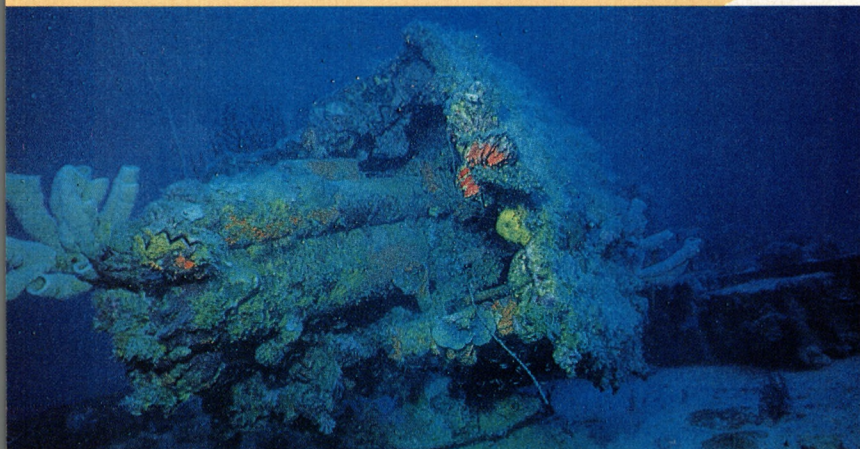
DISCOVERY^{OF THE} FUMITSUKI

LONG LOST JAPANESE DESTROYER
FOUND IN TRUK LAGOON

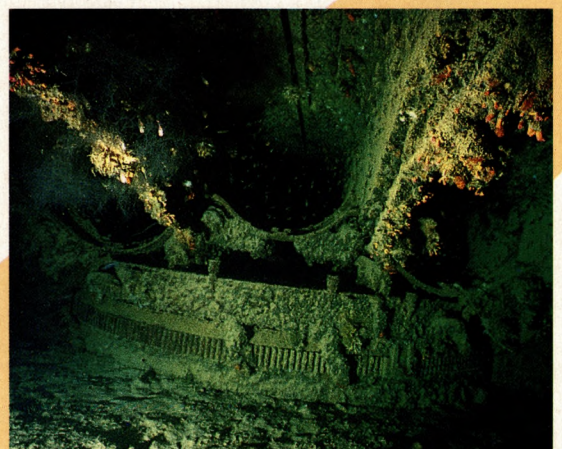
TEXT AND PHOTOGRAPHY BY ROD AND KATHY CANHAM



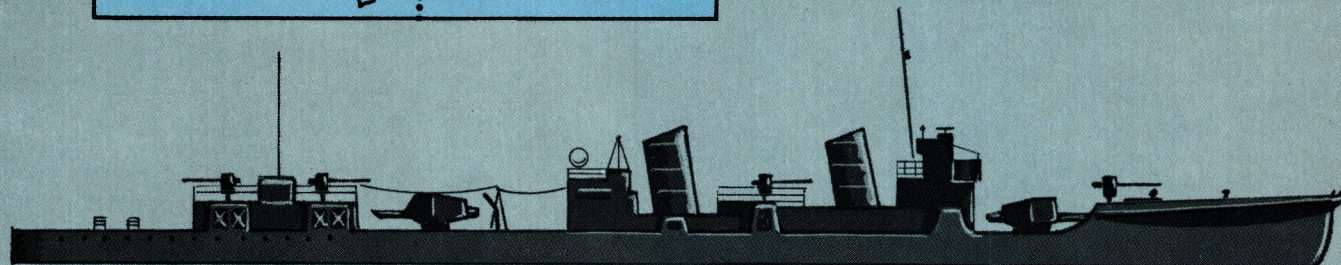
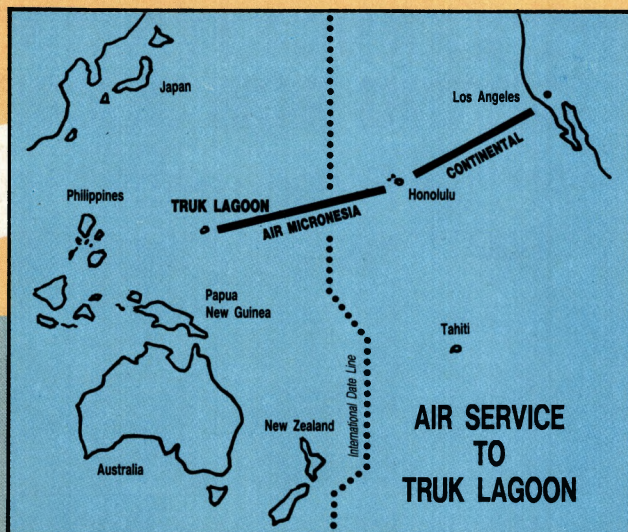
Above: The weapons winch aboard the *Fumitsuki*. Right: The voice tubes at the ship's bridge. Sunk during the U.S. attack on Truk Lagoon in 1944, the *Fumitsuki* remained undiscovered until April of this year. This was partly because of erroneous battle reports. She lies in 125 feet of water.



The 4.7 inch diameter bow gun on the *Fumitsuki*.



A torpedo launcher.



Top: The *Fumitsuki* lies in Truk Lagoon, site of a devastating World War II battle. Continental flies Truk-bound vacationers from Los Angeles to Honolulu and Air Micronesia completes the second leg of their journey. Above: The *Fumitsuki* was a Mutsuki Class destroyer, 12 of which were commissioned—each named in poetic Japanese for a month of the year. *Fumitsuki* means November.

The dream of exploring a virgin shipwreck is the fantasy of adventurous dive enthusiasts worldwide. A remote island group in the South Pacific, Truk, was the setting for a devastating air/sea battle that sent more than 40 Japanese ships and several hundred aircraft to the bottom of a lagoon. Over the past 20 years, these wrecks have been discovered, explored and reported. First, the shallow ones were pointed out by local residents. Then, after researching battle reports,

photographs and sonar scans, the deep-water wrecks were found. One by one, the individual pieces have comprised a mosaic known as "The Ghost Fleet of Truk Lagoon."

A Japanese writer and diving pioneer, Tomoyuki Yoshimura, has exhaustively pursued the story of Truk and its wrecks. His access to Japanese war records, direct interviews with the battle's survivors and 18 trips to Truk have resulted in his compendium, *Major Attack at Truk*, pub-

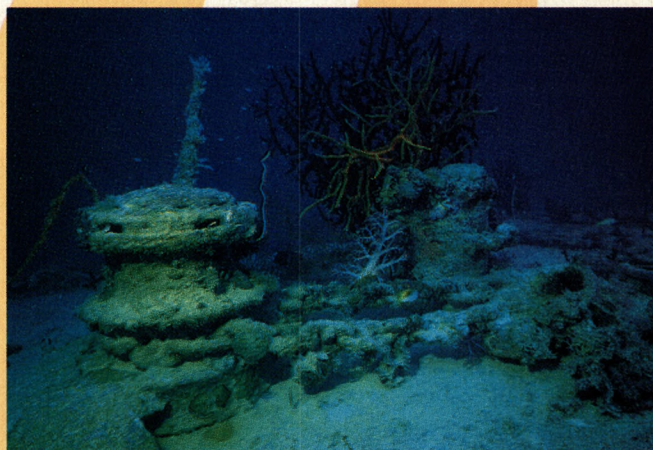
lished in February 1987.

In February 1984, the 40th anniversary of the battle, he discovered one of the remaining enigmas to Truk's puzzle, the *Oite*. This April, after interviewing *Fumitsuki*'s survivors, including her captain, Yoshimura discovered the long lost Japanese destroyer. Two days later, SKIN DIVER realized the dream of exploring the newfound wreck of the *Fumitsuki*.

Commissioned February 16, 1926, the Mutsuki class destroyer *Fumitsuki* was
(Continued on Page 84)



Ammunition box for the bow gun on the *Fumitsuki*.



A double anchorline extends from the forward windlass.

**TEXT AND PHOTOGRAPHY
BY JAN MLNARIK**

"I'm going to ditch! I'm going to ditch!" crackles the voice over the radio, the only sound in the void that should have been filled with the putt-putt of the air compressor.

"He's at 40 feet. Can he make it?" shouts the tender, Jason Newell.

"He'll make it if he drops his weight-belt," answers his uncle, Les Newell, as he tries to bring the compressor to life.

"I've got it! Call him quick!"

"Hold it, John!" Jason screams into the mike. "We've got it! The compressor's running! You can stay down!"

Through the wheeze of his amplified breathing, diver John Tiffany's voice blurs across the deck, "Good! I was already holding my breath. I had the weightbelt in the bag."

"The bag" refers to one of the giant mesh containers dragged along the ocean floor by divers John and Les as they harvest the wealth from the Straits of Juan de Fuca. This waterway, rich with sea life and marine traffic, separates Canada from Washington state.

John and Les, both 28, have turned their skills into profit. As Les says, "The best part is, there's no boss. We work hard, but we're working for ourselves."



Friends all through school, Les and John were both working at dead-end jobs at a sawmill on the Columbia River when Les heard rumors of the impending mill closure. While thumbing through *SKIN DIVER*, he noticed an ad for the Divers' Institute of Technology and this time he read it carefully.

Les had scuba dived for seven years and knew he loved the sport. If he could also make a living at it . . . Married at the time, he convinced his wife to move to Seattle. He got a loan to pay the tuition and prepared to spend six months in diving school. He confided in his burly friend John, also married and the father of two young daughters. Three days later, John said, "I'm going with you."

After graduating from the institute in the spring of 1986, the two toured the South seeking underwater work. Finally, at New

Isabel, Louisiana, they were hired for \$4.50 an hour.

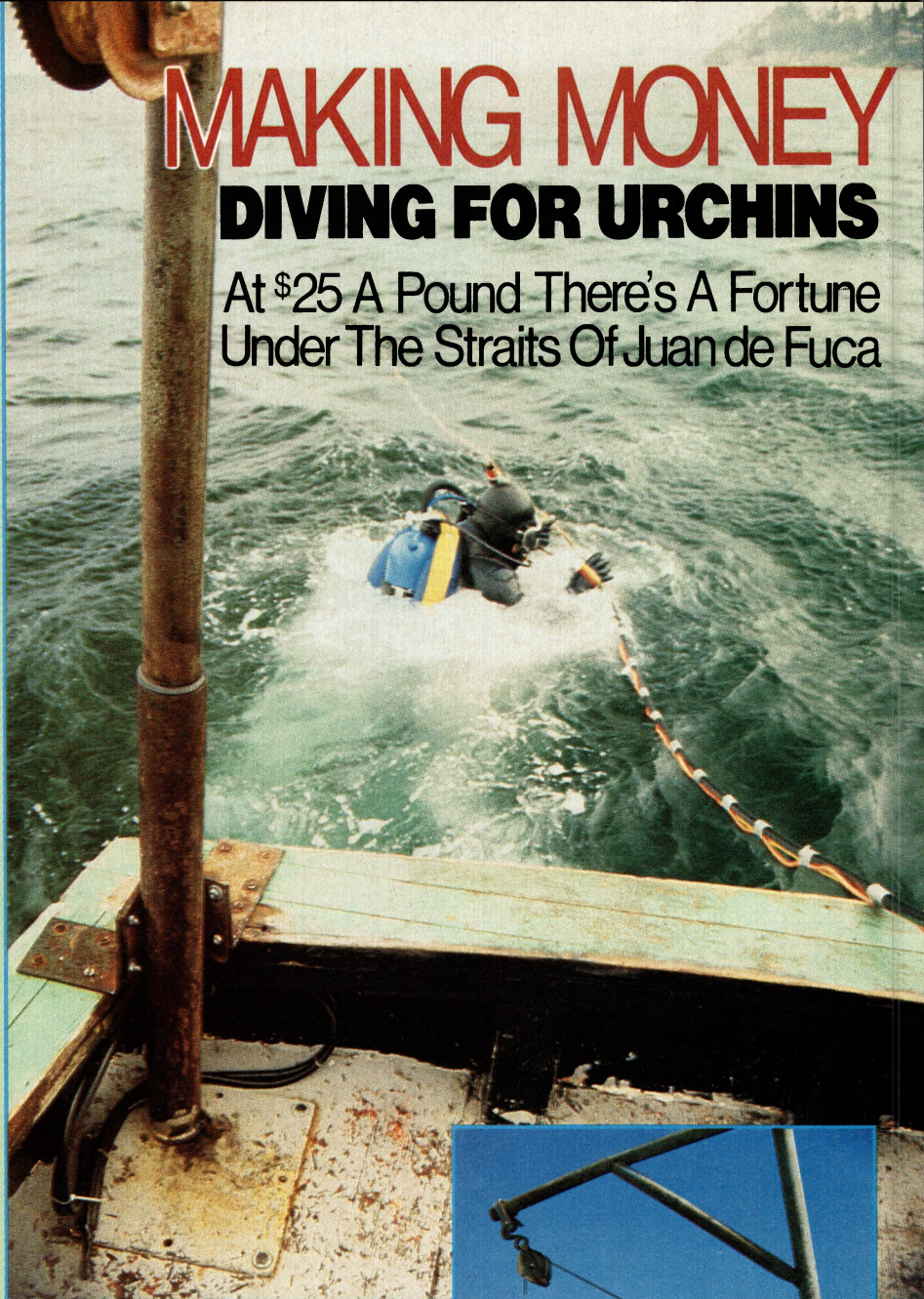
"The timing was terrible," relates Les. "The bottom had just dropped out of oil prices and no one was hiring. The job we got was a laugh, so I flew home. John lasted a month."

Back in Washington state, Les was felling logs in the woods; John had a job in another mill, when his sister called with news of a diving job. John quit the mill and drove to Port Angeles the next day.

The diving job was picking sea urchins; and when Les called to commiserate about his mill job, John proposed a partnership. With borrowed money, they established TNT Company (Tiffany, Newell, Tiffany) and bought an old 26 foot boat, dubbed, of course, *TNT*. They outfitted themselves with diving gear—one suit with a 60 pound belt and a 300 foot um-

MAKING MONEY DIVING FOR URCHINS

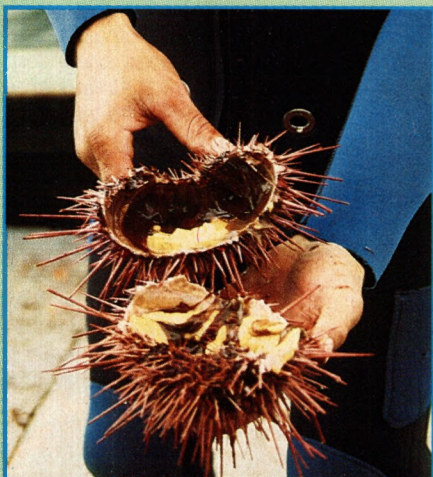
At \$25 A Pound There's A Fortune Under The Straits Of Juan de Fuca



Top: John Tiffany begins an urchin dive. Above left: The sea urchin is protected by spines and a calcareous shell in hues from mauve to bright red. Above: A load of urchins is winched aboard *Dynamite Lady*.



Left and below: Tender Jason Newell helps John Tiffany secure the underwater communications system to his mask. A Walkman radio set and old eight track tape deck provided parts for the system. The enterprising urchin diving team made \$13,000 in its first 38 days of operation.



The only part of the sea urchin used commercially is the roe—gonads—which is accessed by breaking open the brittle shell.



Each sea urchin contains five skeins of roe, ranging from pale yellow to creamy orange. This is a delicacy in sushi bars.



Workers line up along the tables at Daiyo Shellfish where the roe is separated and packed for shipment across the Pacific.

bilical air hose. They cleverly combined working parts from an eight track tape deck and a Walkman radio to fabricate a communication system with the speaker inside the diving mask. They put a compressor and winch on the boat, got the engine running smoothly and set out to harvest spiny urchins from these Pacific Northwest waters.

Millions of urchins are taken each season by divers like Les and John. Garbed in rubber boots that are soon shredded, they walk along the ocean bottom and scoop urchins into the huge mesh containers dragged along behind them through the murky depths. A two foot long pincer tool plucks the placid little urchin from its perch and transfers it into the bag.

Well, the urchin, prickly devil, isn't always placid, especially if one of its

barbed spines breaks off in the skin. The wound, aggravated by the toxin, cannot drain and becomes infected. Citric acid from lemons is said to help draw out the poison, and South Pacific divers maintain uric acid also will neutralize the toxin. If the spine does not work itself out, sometimes it needs to be surgically removed, as a fibrous cyst will form around it.

The rich kelp beds in Puget Sound that are so essential in keeping the urchin fat and healthy pose an ever-present problem to the divers. If they don't tangle themselves or the mesh bag in the long, slimy strands of kelp, the hose stands a good chance of becoming entangled. While it's illegal to cut kelp, both divers carry their standard diving knives in case they have to chop their way free. The pair bear the brunt of teasing by the other divers for carrying the weapons, but John

says, "It's an emergency tool. I wouldn't dive without it."

Les said they always chart a dive profile, even though they're on the no-decompression tables, something most divers don't bother with in these fairly shallow waters. Forty feet is about the maximum depth to walk the bottom and pluck the little pincushions from their perches.

"Hey! I've been bent three times. I know what it's like and I don't take chances," says Les, small, wiry and tough. "We want to stay down as long as we can to fill those bags, but we only have one hose, so we take turns. We found that staying down for a four hour stretch is better than coming up once or twice for a break. For some reason, we don't get as cold that way.

"We want to put in an eight hour day of diving. We have nine bags, and

World record breaker finds College of Oceaneering swimming English Channel



During Eric Johnson's English Channel swim, he incurred commercial divers working a construction site. Even though it took an extra 20 minutes to swim around the construction, Eric still broke the world record. These working divers sparked his interest and a career change. A graduate of the University of Southern California with a Master's degree in Geology and working for Mobil Oil, Eric wanted a career as mentally and physically demanding as his channel training program. Eric chose the College of Oceaneering because he wouldn't settle for less.



The College of Oceaneering's courses, facilities, instructors and referral program hold all the records in commercial diving.

**CALL TOLL
FREE:
1/800
824-9027**

**In California
1/800/367-3947**

**College of Oceaneering
Los Angeles Harbor, 272 S. Fries Ave.
Wilmington, CA 90744-6399 (213) 834-2501**



SEA URCHINS

packed full they'll weigh about 330 pounds each, so 3,000 pounds is a good load for a day's work."

The price for whole urchins is generally about 25¢ per pound, but during the holidays it soars to more than 30¢, as consumers in the Pacific Rim countries do more partying and consumption picks up. During April, as spawning begins, the price drops as low as 15¢ with a bonus for "recovery" or good quality roe.

John flashes his big grin, "We made \$13,000 in the first 38 days! We paid back my sister who fronted us and put a lot back into repairs."

Three months after starting their venture, they bought a second boat for \$600, a 30 foot shell that had been donated to a church. Most of the interior was missing and the engine didn't run. "We spent the winter getting her ready," says John, with a glow of accomplishment. "She's not a beauty, but she's a good boat, a working boat." They named her *Dynamite Lady* and increased their range and payload with the extra four foot length.

The roe, or gonads, are all that is saved from the colorful creatures. These five finger-shaped skeins range from pale cream to bright orange. This product is a delicacy in the Orient, always eaten raw.

"Sea urchin roe is only for the wealthy," says Jane Lee, general manager of Daiyo Shellfish in Fife, Washington, where the trucks from Puget Sound are unloaded. "It sells for up to \$25 per pound, depending on the quality."

At Daiyo, workers stand side-by-side and pack the tiny fingers of orange roe into small wooden boxes, then into insulating foam coolers, then into jets for the flight across the Pacific.

"It's very labor intensive," says Lee. "It's very, very nutritious, as the urchin comes from the bottom of the sea where the minerals settle."

Sea cucumbers, the next product to be harvested, are also nutritious. Lee says, "They are believed to purify the blood like the ginseng root." They, too, are expensive, selling for \$13 per pound in Japan. Her Daiyo plant will process the cucumbers and later the popular geoduck.

Sea cucumber season runs May through October, and *Dynamite Lady* will be out in the San Juan Island area, her deck covered with five gallon buckets of cucumbers that Les and John have brought to the surface.

"I love this life," says Les. "Just spending a day out on the water is a reward. I'll do this 'til I die, I know that."

EDITOR'S NOTE: Sea urchin harvesting should only be attempted by those with special training. It is a very demanding task that can be dangerous.



CROSS CHEST
MODEL
NEW COLORS



FRONT ZIP
MODEL



CROSS CHEST
MODEL



Full Lycra Action Body Suits With or Without Zipper

~~\$59.95~~

Still only

\$39.95
Each

for a Limited Time Only

WHY SUCH A GOOD PRICE?

This is our way to introduce ourselves to you, the Diver. At Sport Europa we manufacture all our garments, so the item you buy goes directly from our factory to your doorstep, this way we bypass the middleman and pass the savings on to you. Now is your chance to get top quality garments at a fraction of the cost. **Satisfaction guaranteed or your money back.**

THE LYCRA ACTION BODY SUIT:

Used under your wetsuit or by itself in warmer water, these suits provide warmth, protection from coral cuts, jelly fish stings, abrasion and sunburn. They also make you look great while providing full freedom of movement. They are available with a full front zipper and contrasting shoulder panels or in a cross over chest model with side stripes. Made with 4 way stretch Dupont Antron® Lycra.

They come in a wide variety of colors as shown here and sizes Small, Medium, Large.

Order Yours Today



CALL TOLL FREE
1-800-327-7031

In Fla. (305) 821-4000

Mon.-Fri. 9:30 a.m. to 10:00 p.m.

Sat: 10:00 a.m. to 6:00 p.m.

(Fla. residents add 5% Sales Tax)

If you are ordering through the mail send check or M.O.
plus \$3.50 shipping.

**Sport
Europa**

4557 S.W. 71st Avenue
Miami, Florida 33155

circle #111 on Reader Service Card

GINNIE SPRINGS



Ginnie Springs' U/W visibility is nearly unlimited. Below: Dive shop assistant manager Cathy Francis and instructor Pete Butt. Bottom: Feeding bream.



FLORIDA'S FANTASY DIVE SPOT TEXT AND PHOTOGRAPHY BY DOUG PERRINE

What would the perfect dive site be like? Not all divers would describe exactly the same kind of place, but most would concur on two points: The water would always be flat calm and visibility would be unlimited. Since this is a fantasy dive spot, we could add a few other characteristics: There would be no long boat rides: In fact, you could just step right off the dock and you would be there. The water would not only be incredibly clear, but it would be so sweet you could drink it. And, you would never have to wash your gear. There would be no treacherous currents, no sharks, no sea wasps or fire coral. There would, however, be fish

and other life forms and historical artifacts to discover. There would be a convenient dive shop and lots of fun things to do. Finally, to go there you would not need: a passport, to learn a foreign language, water purification or anti-malaria tablets, or even to board an airplane.

No dive site is perfect, of course, but there is one that encompasses all of the attributes described above. Ginnie Springs in north central Florida is a tranquil natural getaway on the banks of the Santa Fe River in 200 acres of native forest. The property sits atop the north Florida aquifer (natural underground water reservoir) at a spot where it touches the

surface, sending 260 million gallons a day of pure artesian water boiling up through the numerous springs on the property and out into the river. How pure is the water? A water bottling plant will soon be erected on the surrounding property. Owners Bob and Bobbie Wray sent a sample of the water to the State of Florida to analyze. After performing 126 tests on the water, the state chemist told them that it was the best drinking water in Florida.

Ginnie's brochures advertise visibility "forever." How far is forever? I can't tell you for sure how many hundreds of feet that might be because the spring basins



Above: Canoeing is one of many activities offered at Ginnie Springs. Below: The Ginnie Springs dive shop and general store. The compressor room is on the left.



aren't large enough. You can definitely see everything that is in the water with you very clearly. Underwater photographer Wes Skiles, who serves as Ginnie Springs' diving consultant, has a recurrent problem with the photographs he takes there. People don't believe the pictures were taken underwater. Unless bubbles are present the divers look like they are posed in air. The water temperature in the springs is 72°F year-round and they can be dived in any kind of weather.

About nine of the springs at Ginnie are used for snorkeling and three are open to scuba divers. Ginnie Springs itself has the largest basin—a bowl 60-80 feet

across that slopes down to a depth of about 20 feet in the center. The sparkling sand and limestone bottom is bordered with dark green eelgrass. Schools of bream surround any diver who brings down a bit of bread and turtles clamber around in the grass. At the bottom of the basin an oblong opening leads into an antechamber about 30 feet wide, which opens into the 60 by 70 foot "ballroom." Light from the entrance is visible from all parts of the cavern. Since it takes a few minutes for one's eyes to adjust to the very dim light inside, the management recommends that each diver carry a light. At the far end of the ballroom, at a depth of 55 feet, a metal grate prevents divers from entering the narrow, silty cave system beyond. Artesian spring water blasts continuously up through the grate, flowing out the cavern to fill the exterior basin and spill out the 200 foot spring run into the Santa Fe.

Devil's Eye and Devil's Ear are both on another, shorter spring run nearby. Devil's Ear is right at the juncture of the run and the river where brown tannin-laden river water swirls around the opening, engaging in an eternal struggle for domi-

current (two to three knots) runs down the center of the riverbed, but is manageable near the banks and on the bottom. The depth of the river and its color vary according to the season and the rainfall. Visibility tends to be good—up to 40 feet—May through November. During the winter, or following heavy storms, the water may turn the color of dark tea from tannic acid, which is found in leaves, and visibility is limited to a few feet. While parts of the river may be nearly shallow enough to stand up in during the dry season, in the rainy season the river rises and the dark water may overflow the spring runs. However, unlike some of the other springs in the area, the spring flow is always strong enough to keep the underlying water crystal clear. A great variety of fish can be seen in the river and sometimes in the spring runs, including catfish, bowheads, gars, perch, bass, freshwater eels, bream, mullets, freshwater flounders and red-bellies. The red-bellies build nests in the riverbed and defend them during the summer. Several kinds of turtles can be found in the grass on the bottom, as well as crayfish and other small animals.

Most divers that "do" the Santa Fe are not there for the fish life and care little if the visibility is poor—as long as they can see where they're digging, for this is an artifact hunter's paradise. The cracks and basins in the river bottom are repositories of historic and prehistoric relics. Items that have been found are shark, camel and mastodon teeth; mammoth tusks; python and whale vertebrae; fossilized deer antlers; bottles; bone needles; flint chips; arrowheads; scrapers; and spearpoints.

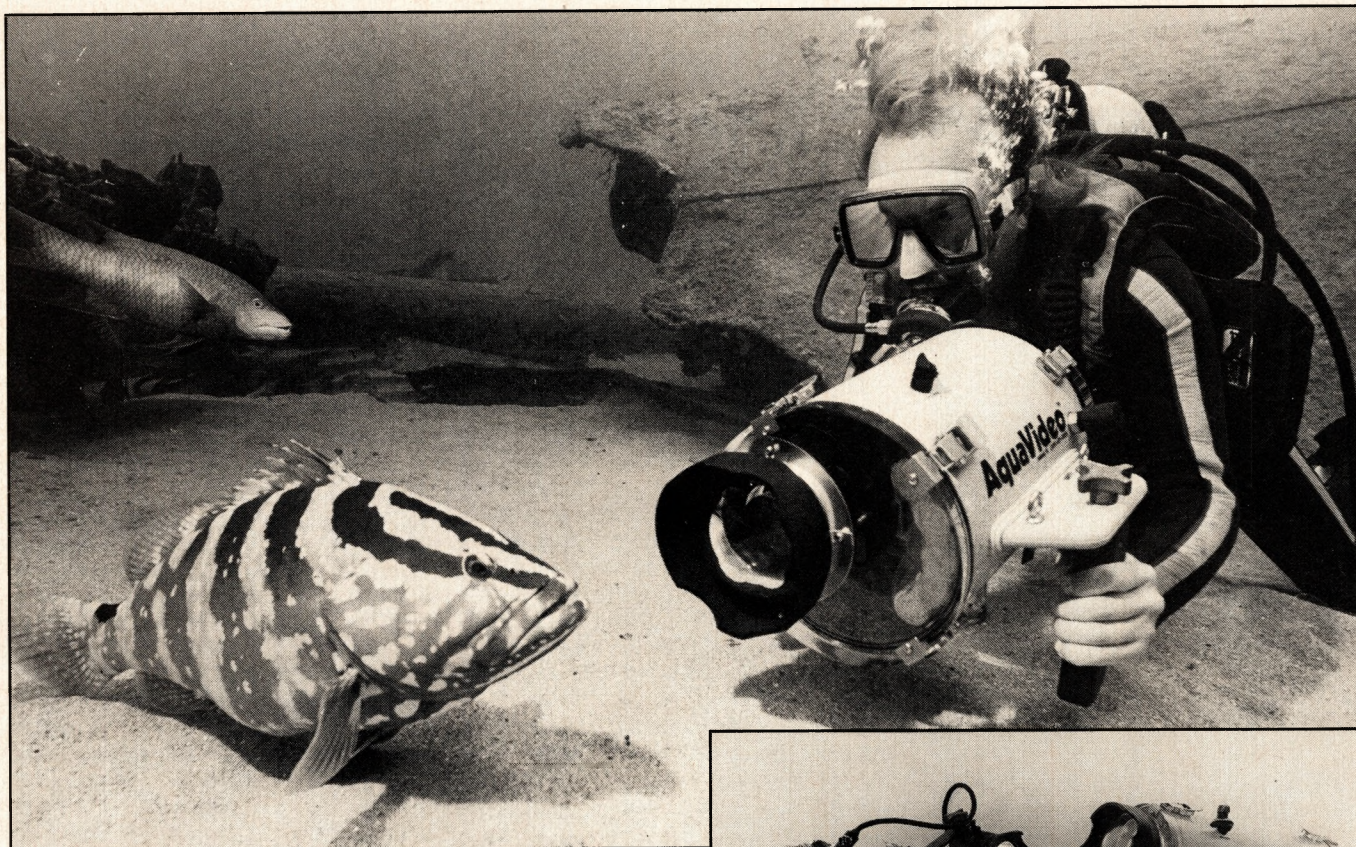
Regular open water certification courses and cavern and cave diver courses are offered, and a full service dive shop is on the premises. In fact, Ginnie bills itself as America's only full service diving and camping facility. There are 55 campsites with electric and water hookups spread out among the trees as well as unlimited wilderness camping. Teepees are available for rental if you don't have a tent. For divers who prefer to stay in a hotel, a package is available with the Quality Inn on I-75 at U.S. 441. The package can be purchased either through Ginnie Springs or the Quality Inn. Several small inns can also be found in the nearby town of High Springs as well as some excellent restaurants. A store and pantry at Ginnie Springs can supply most campers' and visitors' needs.

The fee charged to enter the park is well justified by the many improvements that have been made. Hardwood sun-decks on the banks of the major springs have steps leading down into the spring

(Continued on Page 55)

nance with the clear water shooting up from the spring. Both of these springs have chimneys that drop vertically from a depth of about eight feet to 20-25 feet before twisting off into the cave system. At these springs there are no grates to prevent untrained divers from penetrating to unsafe depths. Therefore, open water divers are prohibited from using lights at these sites, to discourage them from entering anyplace where they can't see their way out. Use of lights is restricted to certified cave divers.

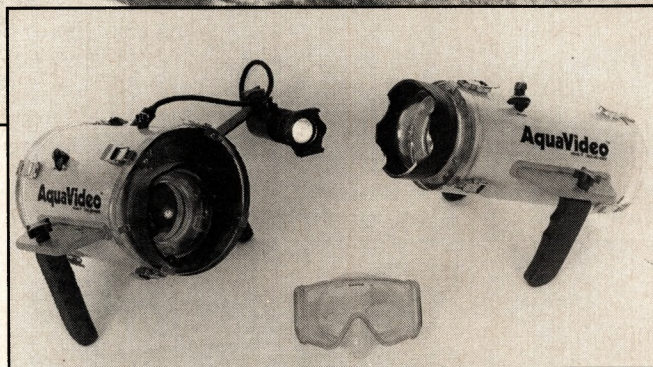
The Santa Fe River makes a very interesting dive when one gets tired of the placid tranquillity of the springs. A stiff



AQUA VIDEO

U/W HOUSINGS FOR ALL MAKES & MODELS

TEXT AND PHOTOGRAPHY BY JIM AND CATHY CHURCH



AquaVideo housings for the RCA CPR-100 VHS-C camcorder (left) and Pentax PV-C800. Mask is shown for size perspective.

photo/courtesy AquaVideo

With the advent of compact 8mm and VHS-C camcorders, growing numbers of divers and U/W photographers are moving into video. And, to meet this growing demand, AquaVideo is expanding to provide U/W housings and lighting systems for the new breed of cameras.

While video cameras differ significantly, the basic AquaVideo housing remains essentially the same. Thus, as new cameras appear, AquaVideo simply updates the housing to accommodate them. The major differences in housing models are the size of the housing and the number and placement of camera controls. The main body is a tough, corrosion-free, polyvinyl plastic cylinder to which a pair of handle wings have been attached. These provide a base for the handles, add to hydrodynamic stability and provide a base for attaching a carrying strap and one or more underwater video lights. The housing bodies have diameters of 6, 8, 10 and 12 inches and body lengths

vary with the cameras housed.

Interchangeable dome, flat and macro ports are easily attached to the front of the housing and a transparent plastic port covers the rear. Both front and rear ports are held in place with quick-release snaps that feature a spring loaded security lock so the snaps can't be accidentally opened. Both ports are sealed with a special X-ring (which has an X cross section) that provides the extra security of a double seal rather than the single seal of an O-ring. The basic controls are power on/off, trigger, white balance (standard if the camera has this function) and a control that can be used as a normal zoom in some situations and also for adjusting image size when shooting macro.

The AquaVideo price sheet is loaded with important facts and details about wide angle lens adapters, U/W video lights, built-in camera viewfinders and auxiliary viewfinders. We recommend studying this sheet carefully! Many of the

housings feature lens systems and dome ports that allow you to take wide angle shots of big subjects as well as wide angle close-ups only a few inches from the dome port. However, more specialized narrow angle macro systems that allow you to fill the frame with tiny subjects are also available.

The viewfinder system, in our opinion, is one of the most important considerations. We favor an electronic viewfinder (a miniature TV screen) that shows exactly what you are shooting. But, while many camcorders feature electronic viewfinders, not all of these are suitable for U/W use. To help with this decision, the AquaVideo price sheet describes and rates the viewfinders (as to their suitability for U/W use) of all the 101 8mm, VHS-C and full sized Beta cameras listed. And, if the built-in viewfinder isn't adequate, they will recommend an appropriate auxiliary viewfinder (a miniature TV set) that

(Continued on Page 148)

BRIGHT IDEAS



MINI C-LITE The MINI C-LITE

Halogen remains unsurpassed for intensity and versatility. The Lite is small in size, its unique rotating switch offers one hand on/off control, and folds to prevent accidental operation. Optional signal strobe module, holster and light bracket are available. Virtually indestructible outer casing is waterproof to 300 feet (90m).



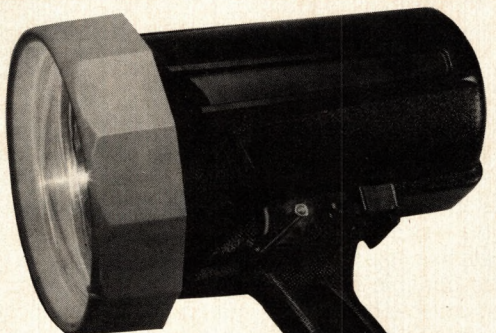
IKELITE C-LITE SERIES

Unique shape allows light to become extension of divers arm. The C-LITE Halogen produces fantastic results with the mirror finish parabolic reflector and high-intensity 7.2 V quartz halogen bulb.



MODULAR LITE SYSTEM

The MODULAR Halogen is the brightest light in its price range and is an excellent choice for the new diver. It is inexpensive and easily converts to the MODULAR Super-Lite or MODULAR Video-Lite by simply adding the optional Ni-cad Module and proper lamp.



IKELITE K The IKELITE

Krypton has established a reputation for durability and dependability. Features one hand on/off control, mirror finish parabolic reflector and 6 volt lantern battery. You can't beat the IKELITE K for features and price.



Contact your local Ikelite dealer
or send \$2.00 for catalog.

ikelite

UNDERWATER SYSTEMS

50 West 33rd Street
P.O. Box 88100
Indianapolis, Indiana 46208
(317) 923-4523



TUSA

LIBERATOR CONSOLE

TABATA'S NEW
SEVEN FUNCTION
DIVE INSTRUMENT

TEXT AND PHOTOGRAPHY BY GERI MURPHY

If you are looking for something special in an analog dive console, check out Tabata's new Liberator. It is compact, stylish and one of the easiest reading combos around. Tabata has taken a radical approach in dive console design, starting with an offset console head, angled much like the business end of a golf club. This 30 degree angle allows the diver to handle the console with amazing ease and avoid wrist cramps.

Yet the most distinctive feature of the Tusa Liberator is the unique horizontal layout of the instrument dials. Instead of being arranged vertically, the Tusa Liberator dials run from left to right. It is a logical approach and more compatible with the way we have been taught to read.

The Tusa Liberator is the first dive console to feature a double dial window for a combination tank pressure gauge and depth gauge. By combining the two instruments in the same case, Tabata has been able to move the two dial faces much closer together. The net result is a far more compact console and easier reading of the two analog instruments.

And, speaking of layout, we should note the sharp, simple design of the dial faces. The numbers and indicator marks are black against a luminescent cream colored background. The entire dial face

glows a pale yellowish-green on night dives, clearly displaying each number.

In addition, caution zones for low pressure and deep depths are clearly marked in bright red. This includes low air pressure from 500 psi to 0. On the depth gauge all depths beyond 100 feet are double marked in red.

With plenty of room to spare, Tabata has added a high quality Suunto underwater compass. It also has a luminescent dial face with the compass rose marked in black. This particular compass can be read either from the top or the side.

The Tusa Liberator console is packed full of goodies and features including a surprise on the back side of the console case. Here you will find a handy emergency tool, consisting of a four inch long (handle included) hardened, corrosion resistant aluminum knife. The actual cutting blade is only 1.25 inches long, but it is sufficient for cutting a diver free from entangling ropes or fishing line. The knife is made of aluminum so it won't affect the accuracy of the compass.

The Liberator console is equipped with a generous 30 inch long high pressure hose with a standard 7/16 inch thread connector fitting. It will fit most any U.S. made scuba regulator including Tabata's new TR-200. The end of the hose is fitted

with a swivel connector so the console head will rotate 360 degrees.

The console and compass are encased in a heavy rubber boot that protects the instruments from shocks and scratches. The boot is available in six stylish colors including: black, colbalt blue, light blue, lavender, pink and yellow. The console is designed to coordinate with Tabata's colorful regulators, masks, snorkels, fins and BC jackets.

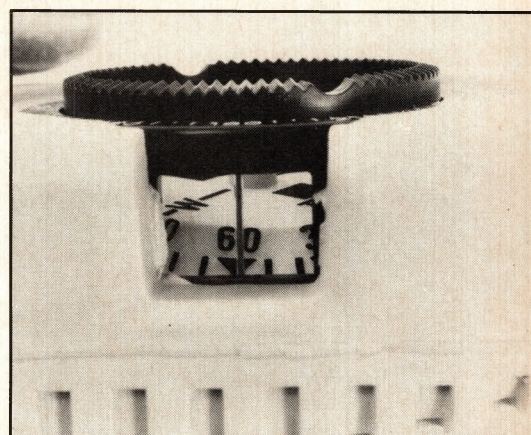
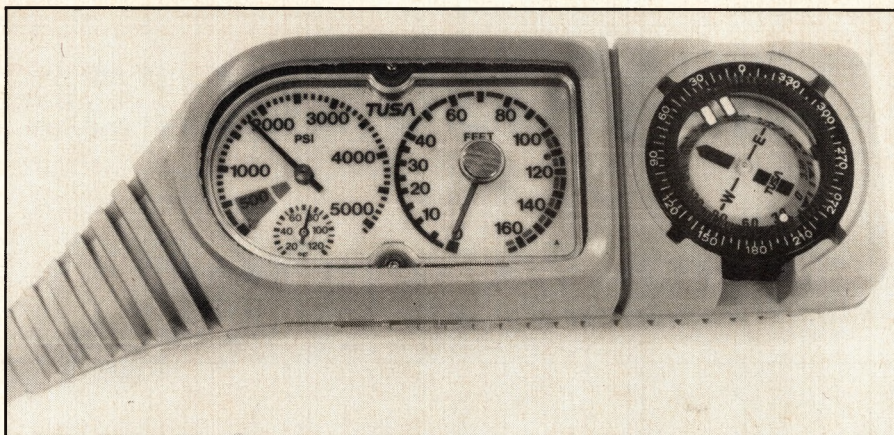
Although compact in size, the Tusa Liberator Console is packed with features. In all, it performs seven functions. Reading from left to right they are as follows:

1) The first analog dial face provides a reading of tank pressure in pounds per square inch, from 100 to 5,000 psi.

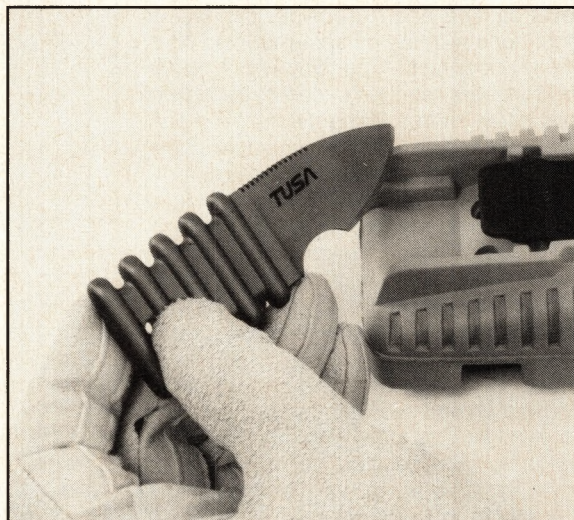
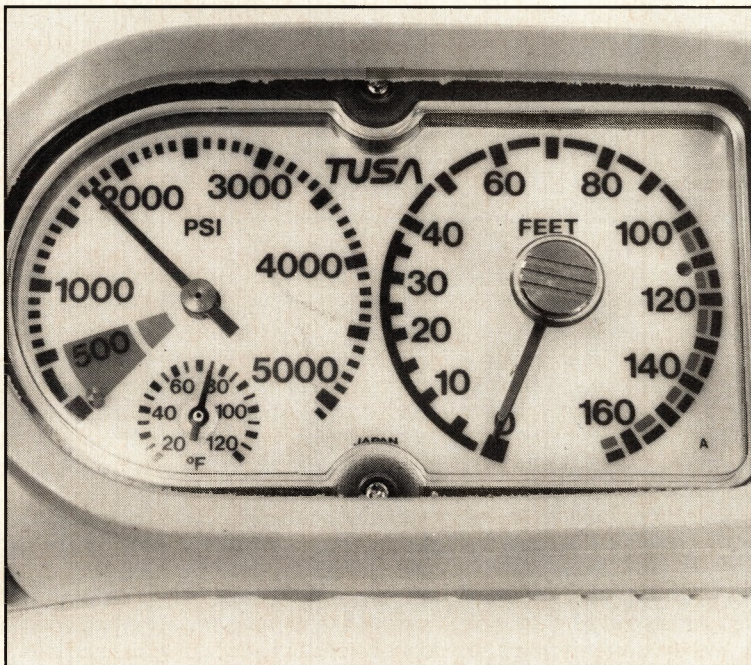
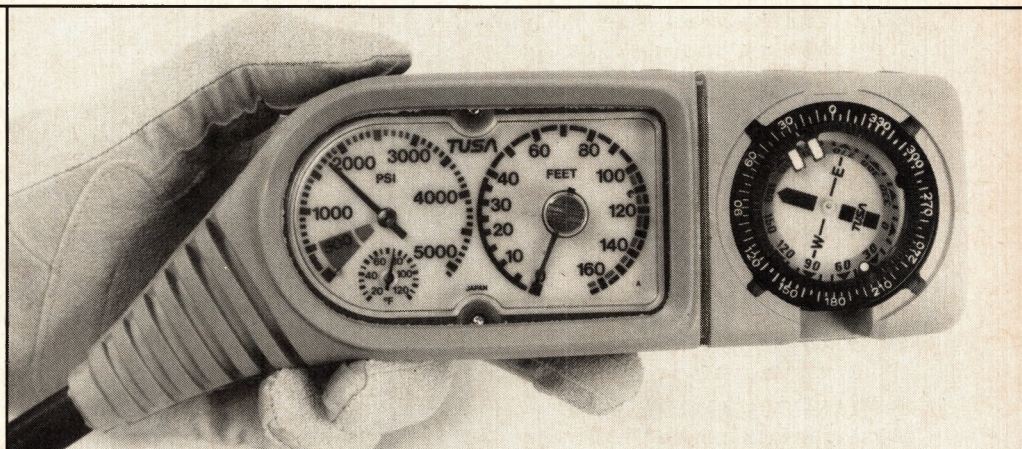
2) The same dial face also provides a low pressure warning zone marked in bright red. This encompasses tank pressures from 500 psi to 0.

3) Directly below the main dial face is a smaller analog thermometer. The scale ranges from 20 to 120°F. This instrument indicates ambient temperature both above and underwater.

4) The second large dial face is the current depth gauge, ranging from 0 to 160 feet. Numbers on the scale start at 10 feet, but there is an indicator mark at five feet.



Opposite page: The Tusa Liberator console and Tabata TR-200 regulator. Above: The Liberator console features a horizontal layout of the analog dial faces for easy reading, left to right. The dials have clearly displayed numbers and indicator marks, caution zones and luminescent backgrounds. Above right: In addition to the normal, top-viewed face, the compass has a side reading window for easy use while swimming. Right: Tabata's Tusa Liberator console is angled to naturally fit the palm of a diver's hand.



Left: The analog dial faces (air pressure, depth and temperature) are mounted together in the same case for more compact design and ease of reading. While the knife/emergency tool may be small, it can come in handy for cutting entangling ropes or fishing line.

5) On the same analog dial face is a maximum depth indicator. It is a red pointer that moves along with the primary depth gauge pointer and pegs the maximum depth attained.

6) The underwater compass allows navigation to and from the dive boat or shore entry site. The side window allows accurate reading while swimming.

7) The emergency tool mounted on the back of the console is useful for a variety of situations including freeing yourself from rope or fishing line.

The Tusa Liberator is undoubtedly one of the most stylish analog consoles to come out this year. It has an original layout of dial faces and is remarkably compact. Its availability in six colors makes

this instrument even more appealing.

The retail cost of the Tusa Liberator Console is \$270, which is not a bad price for such an important piece of diving equipment. For more information, see your local Tabata dive store dealer or contact Tabata USA, Inc., 2380 Mira Mar Avenue, Long Beach Business Center, Long Beach, CA 90815. ✂

SDM'S U/W Video Course

Advanced Shooting Techniques

TEXT AND PHOTOGRAPHY BY JIM AND CATHY CHURCH

The last lesson gave you the basic rule for shooting an underwater video story: Whenever you shoot a new scene or wish to show a new view of the same subject, change image size, change camera angle or change both. You usually change image size by changing the camera-to-subject distance for a LS, MS or CU. Changes in camera angle can be made by tilting the camera up or down as well as moving it to the left or right.

This lesson will emphasize three techniques for changing distance and camera angle: panning and tilting, moving shots, and directional continuity. The goal is to show you how to film a video story that flows smoothly from scene to scene.

PANNING AND TILTING

Panning means moving the camera to the left or to the right while maintaining a level camera angle. Topside, panning is best done with the camera mounted on a tripod. Underwater, panning with a handheld camera requires excellent buoyancy and body control. Tilting means changing to an upward or downward camera angle while shooting. Underwater, where vertical movement is often more important than topside, much of your panning will be a combination of panning and tilting.

The basic purpose of panning is to follow action. For example, imagine you are underwater and see a turtle approaching. You aim your camera ahead of the turtle and begin a slow pan. Then, you turn the camera on and allow the turtle to swim into frame. You pan with the turtle as smoothly as possible, being careful to give the turtle some nose room. To end the scene you slow the pan slightly and allow the turtle to swim out of frame.

The secret of good panning is to do it slowly and smoothly—as with the turtle, above. The problem many beginners have with panning is they try to follow fast action with fast, jerky camera movements. If you are shooting a sergeant major guarding its eggs, for example, panning can be a disaster if you move in close and try to follow the fish's frantic movements. In this case, don't pan—move back to increase the picture area and hold the camera steady.

The combined pan and tilt are excellent techniques for beginning or ending U/W video sequences. The common "divers

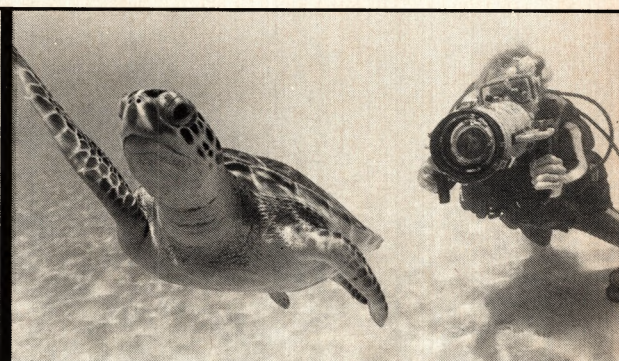
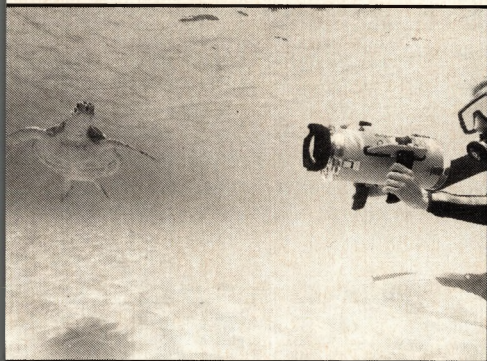


coming down the anchorline" shot has been used hundreds of times, but is still effective when used as a transition between topside and U/W shots. To introduce the viewer to the U/W world, begin with an upward camera angle of the distant divers at the surface. Pan slowly with the divers as they swim down the line at an angle from your upper left to lower right. Brief the divers ahead of time so they won't stare at your camera lens. Have them swim over your right shoulder or below your right elbow as they approach bottom. Slowly stop panning and allow the divers to swim out of frame. Wait a couple of seconds before shutting the camera off. These few seconds of empty scenery provide a transition to the following scene.

Later, shooting the same scene in reverse prepares the viewer for the end of your video story. The scene should begin with the divers out of frame at your lower right, then they should swim into frame. Pan slowly as they swim up the anchor-

line to your left. You can either allow them to swim out of frame before turning the camera off, or you can end the scene as they reach their safety decompression stop. If you wish to shoot them during decompression, make a completely new scene with a different distance, camera angle and without panning.

Panning a scenic view, such a reef or a section of a sunken ship, is where beginners can get into big trouble. If excited, a beginner often starts panning before he has his buoyancy and body under control. Thus, try as he might, the camera movement is jerky. And, even with perfect body control, beginners often pan much too quickly. When panning a static scene, do it slowly and evenly. Don't speed up the pan if the view looks drab and slow it if the scene looks exciting. If you fall into the "fast-slow-fast" trap, stop panning. Likewise, don't suddenly reverse a pan if you accidentally pass something interesting. You're better off to continue or end the pan and then come



Panning—moving the camera to the left or right while maintaining a level camera angle—requires excellent buoyancy control underwater. Tilting will often be combined with panning underwater. Left: Mike Mesgleski pans smoothly by turning his body without kicking. Upper right: Mesgleski ends a moving pan shot by allowing the turtle to swim out of the frame.

SUMMARY

*Each time you shoot a new scene, change distance, camera angle or both.

*Allow subjects to swim into frame to start a scene and to swim out of frame to end the scene.

*Panning is best used to follow action. Allow subjects to swim into frame at the beginning of the pan and out of frame at the end.

*When panning static subjects, pan slowly and smoothly. Don't suddenly reverse a pan.

*Minimize kicking while taking moving shots. Kick first then glide in for zoom shots.

*Viewers are accustomed to left-to-right eye travel.

*Generally, if a subject enters the frame from the left, have the subject exit to right; and if the subject enters from the right, exit to the left.

*If documenting divers on a definite course, such as exploring a wreck from bow to stern, keep screen direction consistent.

*Random changes in screen direction, not implied by the action shown, will confuse the viewer.

*If you must change screen direction and can't support it with a change in action, use one or two intermediate shots to imply camera movement and distract the viewer.

back to the interesting subject with a new distance and camera angle.

MOVING SHOTS

Topside videographers can use zoom lenses to give the impression of movement toward or away from their subjects. U/W videographers, however, must usually move the camera closer to, or farther from, the subject to give the effect of movement. When you move the camera in from a LS to a MS or CU, the easiest technique is to glide. Swim toward the subject until you have momentum, then slow the kick and glide closer as you shoot the scene. The problem areas of this glide are the beginning and the end of the shot. If you are kicking as you begin shooting, or if you try to stop your forward movement while still shooting, you will have jerky camera movement. The secret is to shoot during the glide, not at the beginning or end.

For close-ups, settle on your knees. Then move the camera closer to, or farther from, the subject by leaning forward or backward, or by extending the camera at arm's length or pulling it back. Again, you must have perfect buoyancy and body control or the technique won't work.

The "swim along" is an effective moving shot, but takes practice. The basic technique is to swim parallel to your subject. For example, on a reef with tame fish, have a diver swim slowly along with some bait. As the fish swim with the diver, you move in parallel to them and shoot the action. Because you are holding the camera sideways to your direction of travel, you must swim slowly or you will have jerky camera movement. A variation of this is to swim slightly ahead of the diver. Then, slow down and pan with him as he passes you and swims out of frame.

The "swim around" is one of Jim's favorite techniques. He begins by gliding in on one side of the subject, panning slowly to keep the subject centered. When parallel with the subject, he begins a slow turn around it while keeping the subject centered. After about a one-quarter circle (or when he senses he is about to lose body control), he turns the camera off. Then, he changes angle and distance and begins a new view of the subject.

WATCH YOUR DIRECTION

The direction that action flows across the TV screen (the "screen direction") is important for two reasons: your eye is accustomed to left-to-right eye travel; and, for any given action, changes in direction will cause confusion.

When we discussed the "divers swimming down the anchorline" scene, earlier, we had them swimming from upper left to lower right. As this matches our normal left-to-right eye travel, the scene is comfortable to view. Later, at the end of the U/W video story, we had them swimming up the line from lower right to left. This reversal in direction implies the divers are going back to where they started. In the viewer's mind, the story is over.

Random changes in screen direction, however, will confuse the viewer. Suppose, for example, that you are shooting a school of fish as it swims by. Then, you swim to the other side of the school and continue shooting. The result will be confusion. First the viewer saw fish swimming from left to right, then he saw fish swimming from right to left.

If you must shoot the school of fish from both sides, you must somehow mask the change in screen direction. Assume that you have panned a scene of the fish swimming left to right, but because of a distracting background, you wish to move to the other side of the fish and shoot them moving right to left. How can you get the viewer to accept this change in screen direction? One method is to use one or more intermediate shots to imply camera movement and distract the viewer. You can change the camera position for a head-on or tail-on shot of the fish. This implies you are moving around the school of fish. Then, you can shoot a brief cut-away of a diver's face as he watches the fish swim by. Have the diver turn his head in the direction the fish will be swimming in the next scene.

There is an important exception to changes in screen direction discussed above. What if the school of fish was slowly swimming back and forth in front of a beautiful coral head? As long as the coral head is clearly identifiable in the background, the viewer will accept the changes in direction. ➤



Finally...something to get a grip on.

Uniquely designed, Tank Toppers provides added security and maximum ease of handling to your present scuba gear.

Mounts securely between valve and tank neck, allowing convenience in carrying and loading or unloading of tanks.

Send check or money order for \$19.95 plus \$2.60 ea. for shipping and handling. (Fla. residents add 5% sales tax)

VISA or MASTERCARD Accepted.

Mail to:
Ultra Manufacturing Corporation
12220 S.W. 132nd Ct.
Miami, Florida 33186

Call Toll-Free:
1-800-63 ULTRA
In Florida: (305) 232-0017

circle #112 on Reader Service Card

SPINY LOBSTER

(Continued from Page 26)

from which dive boats depart and some drug stores. Always keep this license nearby when you are diving—don't leave it at home.

FINDING/CATCHING

Lobsters love rocky areas. During mating season, you may also find males in shallow water sitting in small depressions on top of a reef, often in eel grass. It is thought the females come up from deeper water at night to mate with them. Only the lobsters, however, seem to know when mating season is. Those of us looking for them have to cover all the areas they are known to frequent.

One of the lobster's defenses is its spines, found all over the body. There are also sharp, sawtooth-like projections on the edges of the tail. These can cause serious damage to human hands, particularly those made soft by lots of contact with saltwater. This is why bug divers wear protective gloves. Neoprene tends to tear and puncture, so leather or rubber coated gloves are preferred by many. The lobster's spines also allow it to wedge itself into its hiding place. If this happens, alternately pushing and pulling on the creature will usually dislodge it.

The lobster's second defense is its ability to "swim" backward. This comes as a surprise to many novices attempting to bag their first bug. They put the creature in headfirst. To their amazement, it flips its tail and disappears before the bag can be closed. The flight is rapid and erratic, making the animal hard to follow. Lucky the diver nearby, however, as the bug will often be found making an indignant, hasty retreat on the open ocean bottom not far away.

The main thing to remember when grabbing a lobster is: Do not procrastinate! He (or she) who hesitates won't succeed. Don't give your quarry time to react to your presence—grab first, think later. Grab something substantial, such as the tail or the base of the antennae, called the horns. If you grab the antennae themselves or the legs, they will come off in your hands. The bug will be legless or antennaeless only until its next molt, but you will be lobsterless until you learn not to lunge for these expendable parts.

Since lobsters are nocturnal creatures, often found out in the open at night, this is a good time to hunt them. You will need a bright light. I prefer one that does not float, so it will stay put when I set it down. A lobster out in the open has more directions in which to scoot. It is a good idea to pin it to the bottom with your hand(s) to lessen its options.

Since lobster meat spoils rapidly when the animal dies, it is advantageous to keep your catch alive and well. The best

GOLD! TREASURE!

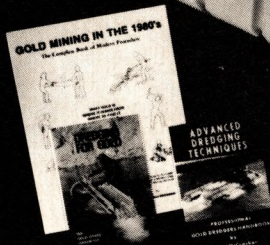
Make your hobby pay off. From panning to dredging to metal detection, gold is a thrill to find. Let us show you how to mix profit with your diving fun. Send for our free catalog.



5" Surface Dredge
Model 5538

3 GREAT BOOKS

Making your mining more productive — "Dredging for Gold" for beginners, "Advanced Dredging Techniques" — for the experienced.



FREE CATALOG

A gold mine of sluices, pumps, dredges, tools, diving equipment, books and detectors. Send for your FREE copy.

KEENE ENGINEERING, INC.

9330 Corbin Ave., Northridge, CA 91324 • (818) 993-0411

☐ Please send FREE CATALOG

☐ "Dredging For Gold." \$7.95 (CA residents add 52¢ tax)

☐ "Advanced Dredging Techniques." \$7.95 (CA residents add 52¢ tax)

☐ "Gold Mining in the 1980's." \$15.95 (CA residents add \$1.04 tax)

Print Name _____

Address _____

City _____

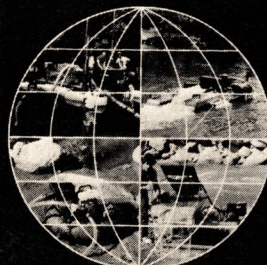
State _____

Zip _____

SD

KEENE ENGINEERING

The World's Largest Manufacturer of Recreational Mining Equipment



idea is to put it in circulating seawater. An alternative is to hang it over the side of the boat in a well secured (both topside and underwater) game bag. Or, if you must store your game bag on the deck of a boat, you can cover it with a burlap sack that you wet down frequently.

LOBSTER GRUYERE

BECHAMEL SAUCE

4 T butter
3 T flour
1½ C half and half
Salt
Black pepper, freshly ground
Nutmeg

Melt butter, add flour and stir until slightly colored. Gradually add half and half, stirring continually until thickened. Cook five minutes and season to taste with salt, pepper and nutmeg.

Lobster meat, cooked and chunked, reserve shell
Bechamel sauce
1 T dry mustard
Cayenne pepper to taste
1 tsp. fresh dill, chopped
1 C grated Gruyere cheese
Parsley or chives, chopped


Mix bechamel sauce, dry mustard, cayenne pepper and dill. Combine sauce with chunked lobster meat and stuff shell with mixture. Sprinkle with Gruyere cheese. Place in 400°F oven until heated through. Garnish with chopped chives or parsley.

CLEANING/COOKING

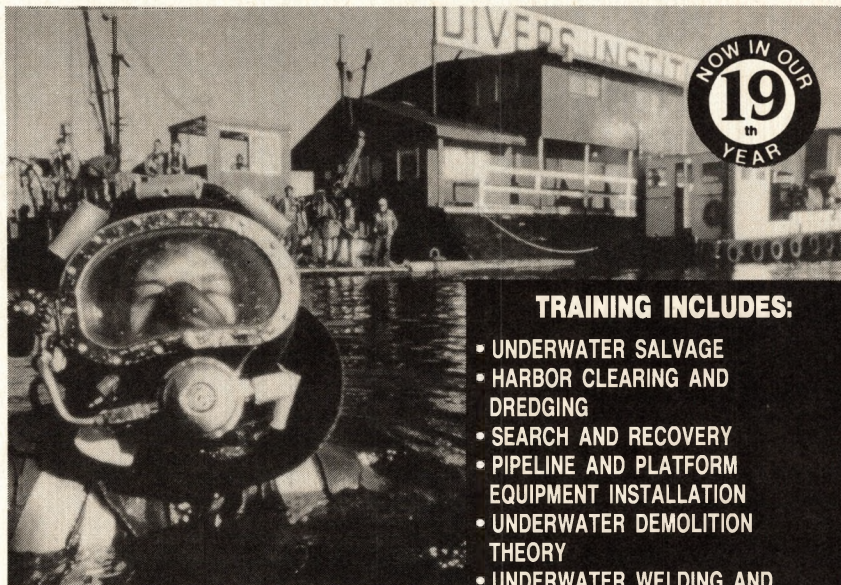
The debate as to whether you should cook your catch first and then freeze it or freeze it raw will likely go on for many more years. This is assuming, of course, that you have too many lobster to eat fresh, which is the very best alternative. No matter what your choice, you must remove the intestinal vein and it reduces the chance of spoilage—according to my biologist friends—if you separate the head from the tail before freezing or cooking. The intestinal vein may be removed either by inserting the tip of the spine covered antenna into the anus and then withdrawing it or by making a cut down the center of the tail and pulling the vein out.

Almost everyone has his/her favorite way of preparing lobster, but if you don't or you want to try something new, we've provided Molly Kelly's Lobster Gruyere recipe, pictured in this article. It tastes as good as it looks.

CONCLUSION

You say you don't have bug fever? Beware—it's catching: Especially if you should ever surface with a big one; find a "glory hole;" or be the only one on the boat who bags a limit. Good luck! 

D-I-T GUARANTEES PROFESSIONAL DEEP SEA DIVER TRAINING



TRAINING INCLUDES:

- UNDERWATER SALVAGE
- HARBOR CLEARING AND DREDGING
- SEARCH AND RECOVERY
- PIPELINE AND PLATFORM EQUIPMENT INSTALLATION
- UNDERWATER DEMOLITION THEORY
- UNDERWATER WELDING AND CUTTING
- UNDERWATER PHOTOGRAPHY AND VIDEO
- RIGGING
- PNEUMATIC AND HYDRAULIC TOOLS
- DEEP DIVES TO TWO HUNDRED FT.
- DEEP DIVES ON MIXED GAS (HELIUM & OXYGEN)
- PROFESSIONAL TENDER OPERATIONS
- HULL CLEANING AND REPAIR
- COMPRESSION CHAMBER OPERATIONS
- AND MUCH MORE!!!

WE GUARANTEE YOU:

- PROVEN COMMERCIAL DIVING INSTRUCTORS
- NATURAL WORK ENVIRONMENT (NOT POOLS AND TANKS)
- OPEN WATER DIVES TO TWO HUNDRED FEET
- USE OF EQUIPMENT CURRENTLY BEING USED IN INDUSTRY
- TRAINING ACCEPTED IN INDUSTRY
- PROFESSIONAL DIVER TENDER INSTRUCTIONS
- STRAIGHT TALK—THE WAY IT IS

APPROVED BY:

Dept. of Education as an eligible institution for the Guaranteed Student Loan, National Direct Student Loan, PELL Grant and Supplemental Educational Opportunity Programs. Washington State Commission for Vocational Education for Veterans Training.

MEMBER OF:

National Assn. of Trade and Technical Schools (NATTS)
Assn. of Commercial Diver Education (ACDE)
Assn. of Diving Contractors (ADC)
Undersea Medical Society (UMS)
Institute of Diving (IOD)
Wash. Assn. of Trade and Technical Schools (WATTS)
Better Business Bureau (BBB)

GET YOUR CAREER STARTED TODAY

**DIVERS
INSTITUTE OF
TECHNOLOGY**
(206) 783-5542

D.I.T. is accredited by Accrediting Commission of the National Association of Trade and Technical Schools.

P.O. BOX 70312, SEATTLE, WA 98107

Send for our catalog. It contains full disclosures: course outline, employment statistics, instructor qualifications, tuition refund policy, standards of progress, financial assistance, etc.

SDM-10

NAME _____

ADDRESS _____

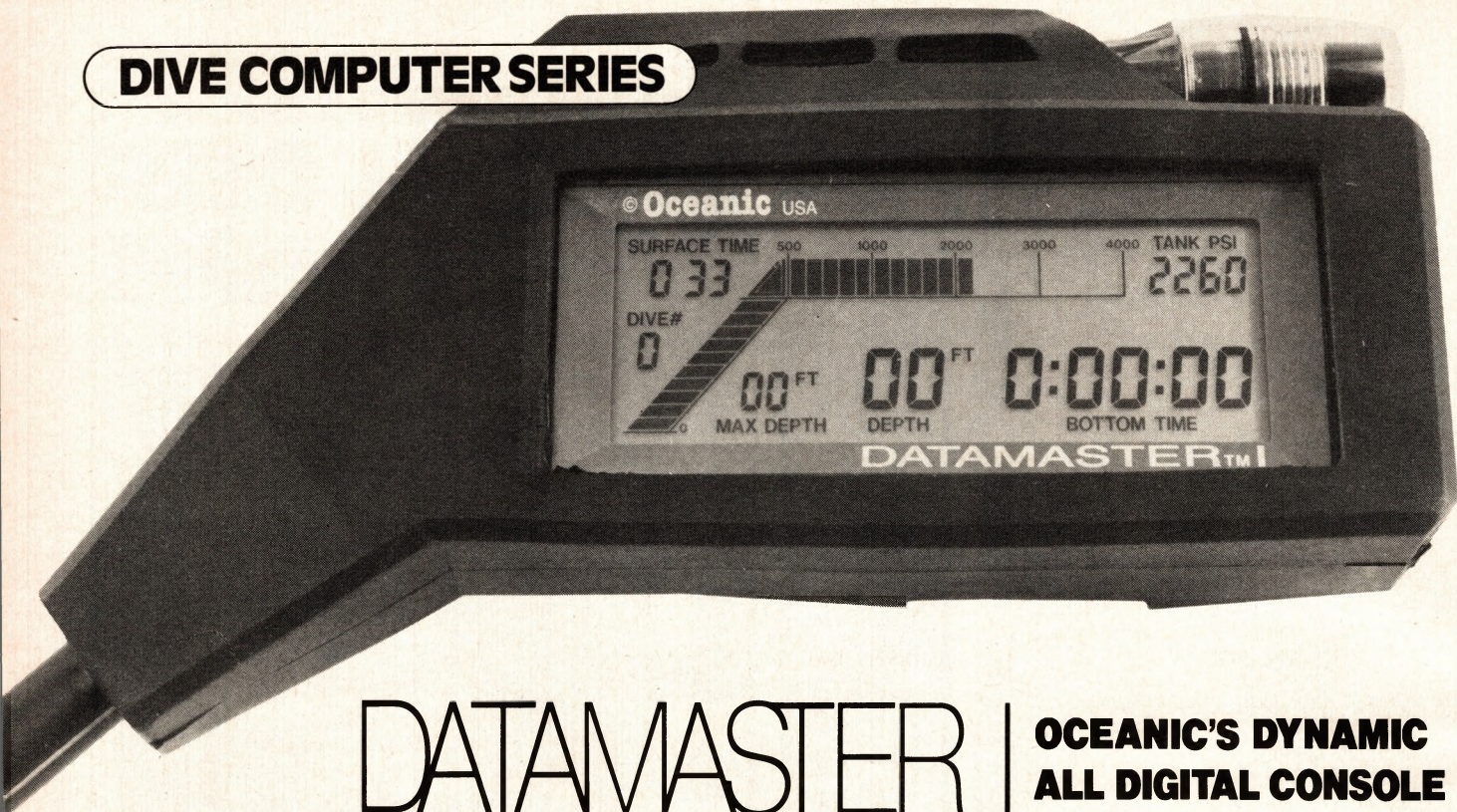
CITY _____

ST. _____

ZIP _____

PHONE _____

DIVE COMPUTER SERIES



DATAMASTER | OCEANIC'S DYNAMIC ALL DIGITAL CONSOLE

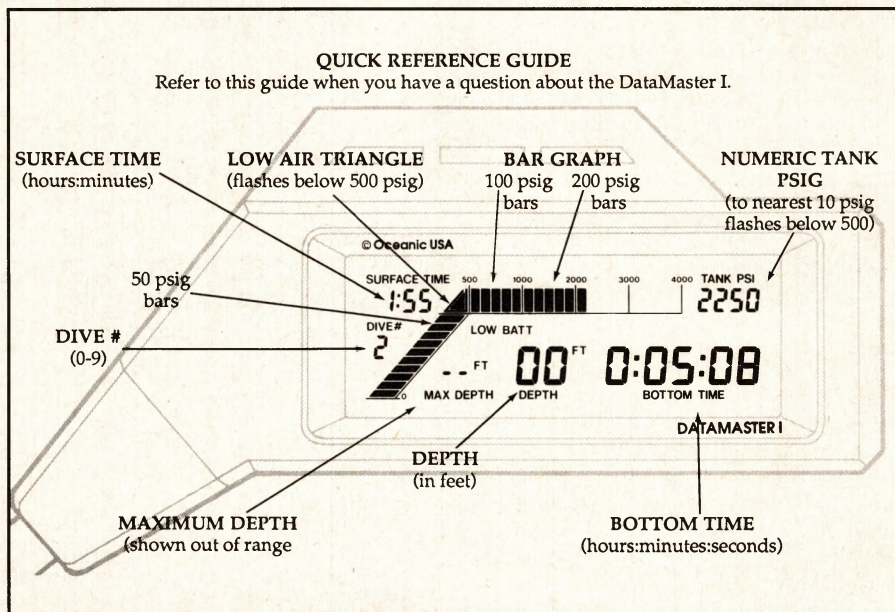
TEXT AND PHOTOGRAPHY BY GERI MURPHY

The DataMaster I is one of that new breed of all-digital dive consoles that look like they belong in a James Bond film. It is completely computerized, featuring a state-of-the-art microprocessor and miniaturized electronic circuitry. All dive instruments and data readouts are contained in one sleek, ultra-compact case. It features a futuristic display screen crammed full of digital information and graphics that are well beyond the current generation of analog consoles.

Designed by Oceanic USA, the DataMaster I is a super smart dive console that would delight even the most advanced technoid or computer buff, yet is so simple to operate even a novice diver would enjoy using it. It could become your most trusted diving companion.

The DataMaster I is designed to operate with any current U.S. designed scuba regulator. It has a standard 34 inch long high pressure hose with a standard 7/16 inch fitting. We checked this aspect by attaching the console to a one-half dozen top model regulators from various manufacturers, including of course, Oceanic's own Omega II.

The similarity between the DataMaster I and other consoles stops with the high pressure hose. One of the most distinctive features of this instrument is the off-set console head. It branches off the hose on a 40 degree angle making it resemble the head of a golf club. This ergonomic design provides easier handling of the console during a dive and allows a horizontal display screen. It fits the palm



The DataMaster I digital dive console offers important information on surface time, air pressure (numeric and graphic), dive number, depth, maximum depth and bottom time.

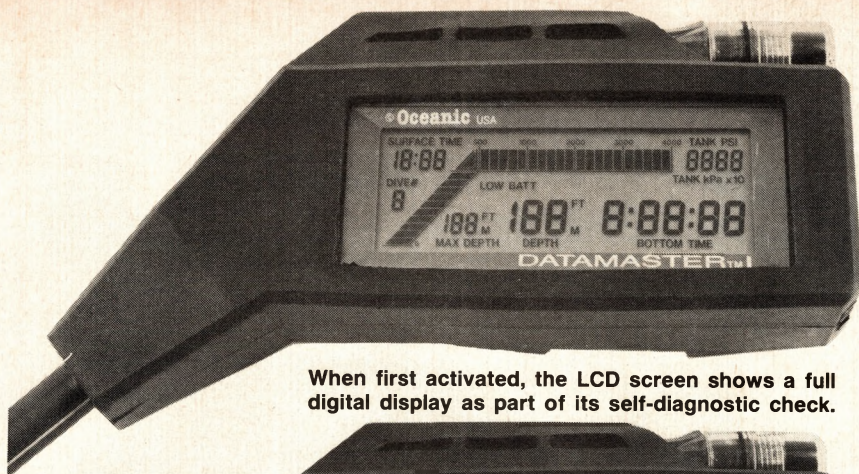
of the hand somewhat like a pistol.

While the DataMaster I may be a sophisticated electronic instrument, it is also quite rugged. The case is constructed of clear, molded Lexan polycarbonate resin. This is the same material from which underwater camera housings are often made. The console also features an extremely rigid backplate made of Noryl glass filled resin. It is sealed with an O-ring and secured with eight stainless

steel screws.

One of the most attractive features of the DataMaster I is its ultra-compact design. The console case is only six inches long, two inches wide and one inch thick, yet it is crammed with an astounding array of dive instruments and data displays. It is 20 to 40 percent smaller than most consoles containing an equal number of dive instruments.

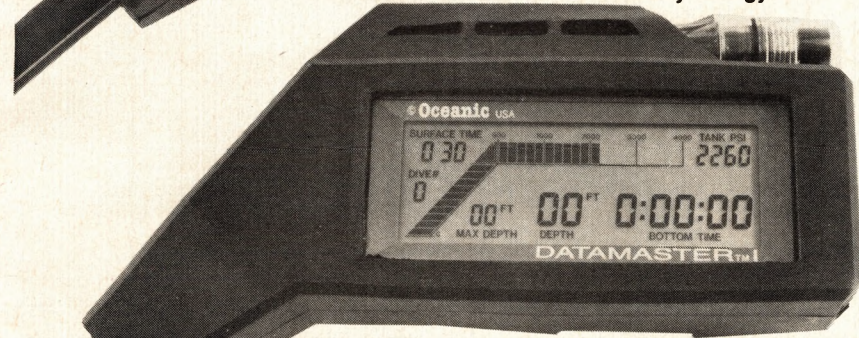
The console case is cradled in a thick,



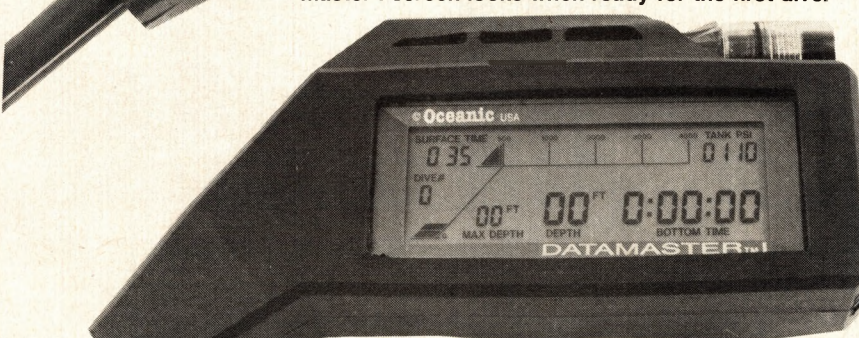
When first activated, the LCD screen shows a full digital display as part of its self-diagnostic check.



As part of the self-diagnostic check, the Datamaster I console measures its own battery energy level.



After 30 minutes at the surface, this is how the Datamaster I screen looks when ready for the first dive.



When tank pressure drops below 500 psi the screen shows a flashing triangle and digital display.



In battery saving mode the Datamaster I's screen is blank—until the scuba tank valve is opened.

soft, neoprene boot that cushions the instrument from hard knocks and scrapes. The Datamaster I can take a beating should dive conditions get rough.

In addition to serving as a protector, the Datamaster I boot also functions as a light holder. A small tubular holster just above the console case is designed to carry Oceanic's MiniHylite. This light is very handy for peering into cracks or as a backup for reading the display at night or in other low light conditions. The MiniHylite holster will accommodate a chemical lightstick for night dives that could also illuminate the display.

The back of the boot contains a circular recess in which a small writing slate has been inserted. Although small, this slate is handy for one or two word communications to a dive buddy. The same recess will accommodate Oceanic's Slimline underwater compass as an optional accessory. This compass features a top reading dial that is fully luminous and a ratchet bezel for navigation underwater or on the surface.

The Datamaster I's most prominent feature is its futuristic Liquid Crystal Display (LCD) screen, exhibiting a multitude of dive data. This LCD screen is almost as large as the entire console case.

Beneath the LCD screen, deep inside the console case, is a fully computerized electronic instrument. It is one of the few dive computers that is tied into the high pressure circuit of the scuba regulator and tank.

The "eyes and ears" of the Datamaster I are two pressure transducers and analog-to-digital microchips that convert pressure into digital display information. A high pressure transducer at the end of the high pressure hose precisely measures tank pressure every second. A low pressure transducer at the opposite end of the case constantly monitors ambient pressure from the surface to a maximum depth of 199 feet.

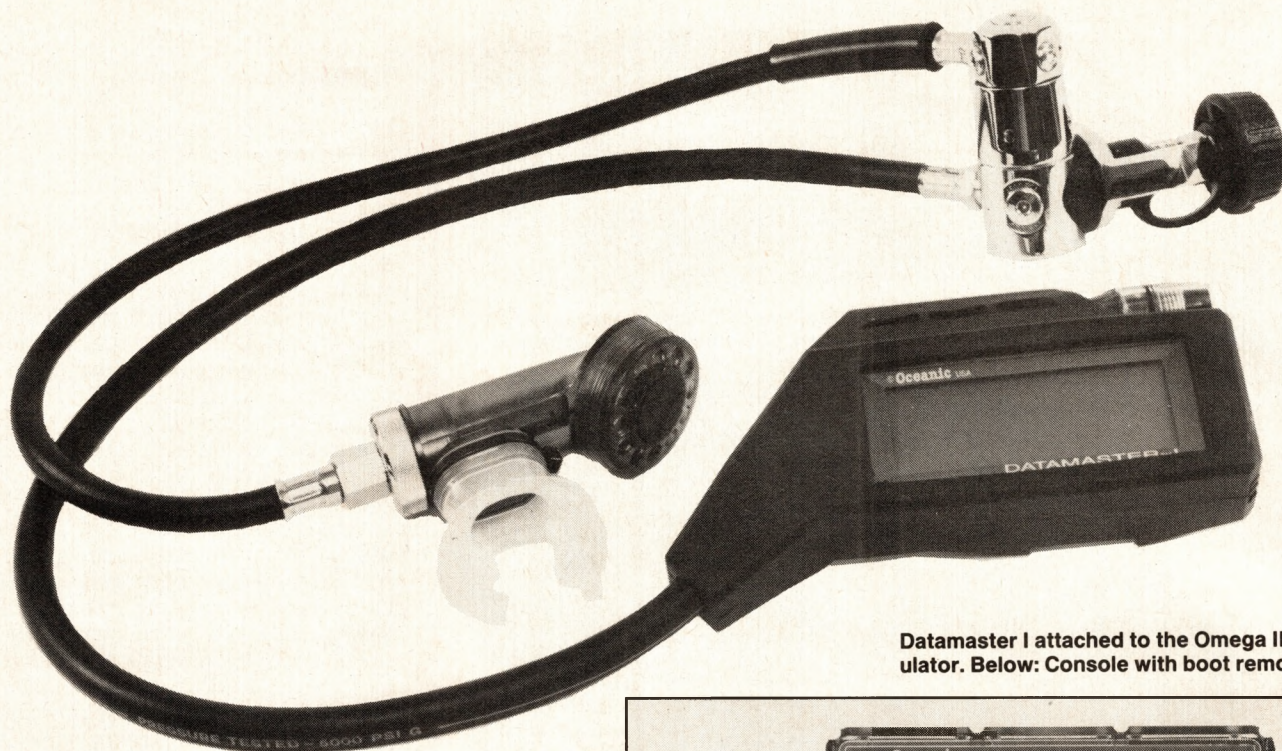
The Datamaster I also contains a computer clock for reporting bottom time and surface interval time.

The Datamaster I's entire computer system and digital displays are powered by two, three volt lithium long life batteries, giving 6,000 hours of operation (about 300 average diving days). When this console is not in use, it goes into an energy saving sleep mode to conserve battery life.

The projected life of the Datamaster I batteries is three years with average sport diving usage. A low battery warning will be displayed on the LCD screen when battery power drops to the 15 percent reserve level. Even at this point the Datamaster I still has 900 hours (45 diving days) remaining.

DISPLAYS

The LCD screen of the Datamaster I has a bright silver background with highly



Datamaster I attached to the Omega II regulator. Below: Console with boot removed.

contrasting black numerals, words and graphics. The screen measures 3.6 inches long and 1.25 inches wide.

One of the most unique aspects of the LCD screen is that all displays are designed to read horizontally. The most critical information (tank pressure, depth, bottom time) reads from left to right. These three pieces of critical information are the largest displays on the screen.

Data on the screen is arranged in six numerical groupings, plus there is a large bar graph. Each grouping includes descriptive phrases or words such as: SURFACE TIME, TANK PSI, DIVE #, MAX DEPTH, DEPTH and BOTTOM TIME.

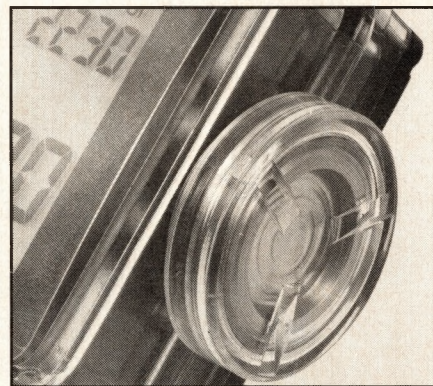
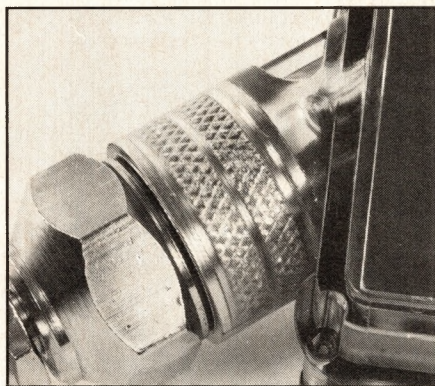
The most important aspect of the Datamaster I screen is that all of the dive information is displayed at the same time. One glance at the LCD screen will give the diver a full overview of the diving situation. Each numerical display is clearly identified by a descriptive phrase or word to avoid confusion.

The most impressive display (and the largest) is the tank pressure graph. Pressure from 0 to 500 psi is arranged on a vertical slant with each bar representing 50 psi. Pressure from 500 to 4,000 psi is shown horizontally. Pressure from 500 to 1,000 psi is marked in 100 psi bars. Pressure from 1,000 to 4,000 psi is marked in 200 psi bars. The graph is easy to read at a quick glance.

A triangle at the 500 psi point of the tank pressure graph flashes a warning when pressure drops below 500 psi. The digital tank pressure display flashes at same point.

FUNCTIONS

The Datamaster I has no external



switches, buttons, or levers, yet it will perform a total of 17 automatic functions. This is the beauty of a computerized electrical instrument and why such devices are referred to as being "smart."

From the moment the Datamaster I is assembled and tested at the factory, it is switched on and operating. Most of the time it resides in sleep mode, conserving battery energy and awaiting activation. When called upon, here are all of the things the Datamaster I will do:

Auto Turn On—Once the scuba regulator is connected to the tank and the valve is opened, the Datamaster I will au-

tomatically activate its electrical circuitry and LCD screen when the pressure in the hose reaches 50 psi or greater.

Auto Self Diagnostic Check—When the LCD screen is activated, the Datamaster I will run through a self-check of its pressure sensors, clock, battery power and all digital displays. This self-diagnostic check ensures the diver the console is functioning properly and providing accurate information.

Computer Malfunction Warning—Should there be any sort of malfunction or damage to the Datamaster I computer circuitry, all digital displays on the screen

will start flashing simultaneously. Should this occur, the console should be turned off and restarted for a double check. If the flashing persists, the console should be taken in to an authorized Oceanic dealer for service.

Low Battery Warning—The Datamaster I has a way of precisely measuring the remaining electrical energy in its two lithium batteries. When battery power drops to the 15 percent reserve level, a LOW BATT warning indicator will appear on the LCD screen. This means the Datamaster I has 900 hours (45 diving days) of operation remaining. If there is insufficient battery power for a day's worth of diving, the Datamaster I will not activate its LCD screen and therefore should not be used.

Auto Altitude Adjustment—Regardless of whether you are making a dive at sea level or in a high mountain lake, the Datamaster I will "zero out" its depth gauge according to ambient atmospheric

resolution of this display is within the nearest 10 psi. For example, a tank pressure of 2,152 psi would read 2150.

Pictorial Tank Pressure—The Datamaster I is also equipped with a pictorial representation of tank pressure in the form of a bar graph. While not as accurate as the digital display, the graph provides a quick reference as to remaining air pressure. This is shown by black bars representing units of pressure.

Low Pressure Warning—The Datamaster I has a built-in low pressure warning system to alert the diver when the tank pressure decreases to 500 psi.

Auto Dive Mode—As the Datamaster I descends below the depth of seven feet it will automatically switch into dive mode and start the clock running for bottom time. It also resets the surface time back to zero for the next surface interval.

Current Depth—The Datamaster I provides a digital display of current depth in jumbo size numerals. It will track depth

her ascent, the Datamaster I will display the maximum depth attained during the dive. The max depth display is separate from the current depth display and has smaller numerals to avoid any confusion.

Auto Surface Mode—Once the Datamaster I ascends to a depth of three feet or less, it will automatically switch into surface mode. In doing so, it automatically switches on the surface interval timer and freezes the display for bottom time.

Surface Time—The Datamaster I will count surface time in hours and minutes. The numerals are separated by a colon that flashes at one second intervals. The surface timer will count and display time to a maximum of 11 hours/59 minutes.

Elapsed Bottom Time—Once on the surface, the Datamaster I preserves the bottom time reading. This enables the diver to record maximum depth and bottom time in his or her dive log and also plan the next repetitive dive.

Dive Counter—The Datamaster I also counts the number of dives during a day and displays that number under the descriptive phrase DIVE #. It can count from zero to nine dives and will then recycle back to zero. The dive counter will count any descent as the next dive, as long as there is a ten minute surface interval. The counter resets itself to zero after a 12 hour surface interval.

Auto Sleep Mode—The Datamaster I will retain dive information while being switched from an empty scuba tank to a full one. However, the console will shut itself down and zero out all digital displays 12 hours after the last dive. It will go into sleep mode, conserving battery energy and awaiting the next dive.

WHAT DATAMASTER I DOES NOT DO

Although the Datamaster I is fully computerized, it does not provide decompression information. This is the basic difference between the Datamaster I and the Datamaster II (see July 1987).

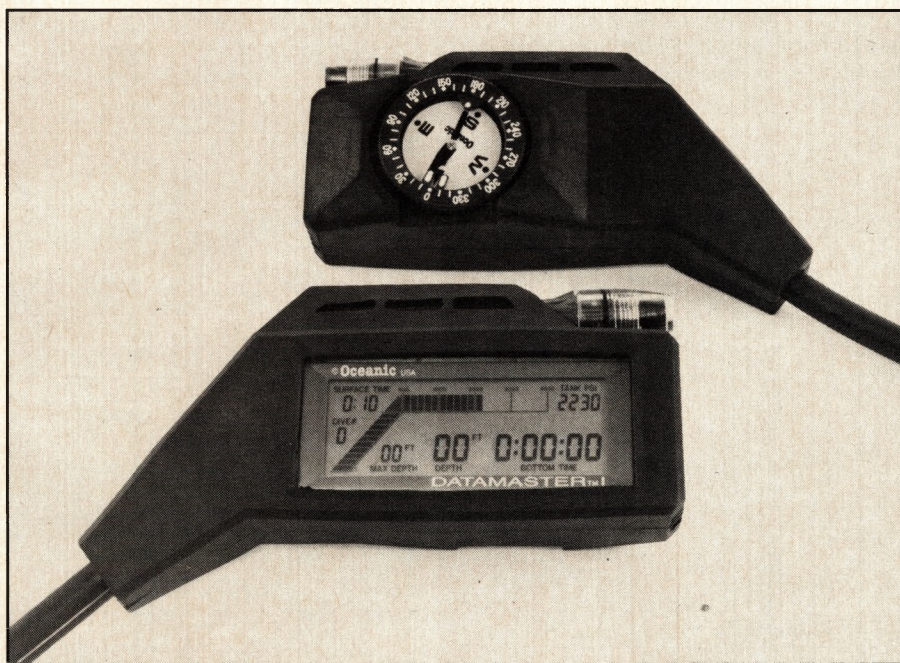
There are several displays that differentiate the Datamaster models. The I doesn't have an ambient temperature display nor does it give the user a repetitive dive group letter after the dive.

Another important distinguishing factor between the Datamaster I and II is the absence of a Remaining Dive Time display. The Datamaster I does not monitor air consumption and compute dive time remaining. If you wish to have these added features, consider the more expensive and more sophisticated Datamaster II.

The Datamaster I is nearly identical to the Datamaster II in most other respects. It utilizes the same sophisticated high and low pressure transducers, computer circuitry, LCD screen and console case.

CONCLUSION

If you are seeking a high-tech dive con-
(Continued on Page 145)



Opposite page, bottom: The high pressure sensor for the Datamaster I's digital and graphic tank pressure displays is at the hose connection. The low pressure sensor for the depth display is at the other end of the case. Above: The front and back of the Datamaster I, showing the Slimline compass and MiniHylite inserted into the rubber boot.

pressure. For this reason, the tank pressure must be turned on while on the surface, while the Datamaster I is out of the water and can sense the atmospheric pressure. Also, if turned on U/W, the Datamaster I could give incorrect depth readings for the first dive because it read an incorrect zero. This would correct itself at the end of the first dive.

Digital Tank Pressure—The Datamaster I is equipped with an extremely accurate digital tank pressure display. It will show working pressures from 0 to 4,500 psi and is accurate to plus zero or minus one percent error. The numeric

from 0 to 199 feet and has an accuracy of plus one to minus zero percent error. The display resolution is to the nearest one foot. For example, a depth of 20 feet, 6 inches would be displayed as 21 feet.

Running Bottom Time—Beginning at a depth of seven feet, the Datamaster I will count and display bottom time in hours/minutes/seconds. It is a very precise system and the numerals are jumbo sized. This computerized timer will count bottom time up to 9 hours/59 minutes/59 seconds. It is accurate to within plus or minus one second per day.

Max Depth—As the diver begins his/

Some boating manufacturers seem to go to extremes to prove the stability and seaworthiness of their products. Since the earliest known boat—the dug-out canoe—shipbuilders have been trying to build the perfect boat. We all know what happened to the *Titanic*, and while many other yachts claim to be unsinkable, the Delta 38 foot commercial dive boat has actually proved its unsinkability.

The scene may have easily been clipped from a Miami Vice episode, but in South Florida waters, the action was all very real. In 1979, the first Delta 38 dive boat was built and sold to a prominent Florida dive operation. The boat was quite popular among local divers and the owners enjoyed steady bookings. The handsome hull design, low cut transom, high freeboard and ocean stability proved an excellent design for diving. However, those qualities that made the Delta 38 attractive to divers also attracted drug runners. The Delta 38 was stolen and used in the illegal transportation of drug contraband. The boat was reported stolen and before the first transportation of drugs took place, the authorities were tracking the thieves.

In order to avoid capture, the drug runners machine gunned the boat and left it to sink. It never did! Because of the integral watertight compartments, the Delta 38 floated for several days until it was salvaged. The boat thieves were prosecuted and, today, after being repaired, the first Delta 38 dive boat is still operating and enjoying added recognition in the diving industry.

While the Delta 38 commercial work boat can be used for many applications, it is regarded as one of the very best dive boats in operation today. In fact, more than 50 percent of all boats being built by Delta in Cape Canaveral, Florida are delivered to the diving industry. With orders coming in from all over North America, the Caribbean and Europe, Delta Boat Works is enjoying a very promising year, with a very proven product.

As a boating buff, and one who enjoys a little police nostalgia, I managed to rendezvous with Larry French, owner of Underwater St. Croix in the USVI, to look at his new Delta 38.

After looking hard at various other work boats, French decided on the Delta 38 for obvious reasons. The hard chine

modified V-hull improves ocean stability. When large ocean rollers and choppy seas create havoc on most dive boats, the Delta 38 rides like a fixed platform. The low cut transom allows easy access to the water. One giant stride and you are on your way to an underwater adventure. The large bench seats with side mounted tank racks and gear storage underneath provide comfortable and safe riding to and from the dive site. And, the large swim-on dive platform with fixed entry rail makes water exits and entries easy.

Like each of the Delta boats, which include the 28, 36 and 46 footers, plus the 28 and 36 foot sportfisherman models, the 38 footer is constructed of molded fiberglass with stainless steel hardware and teak trim. The overall length from the anchor pulpit to the teak dive platform is 38 feet exactly and it has a very wide beam of 12' 5". A storage cabin that doubles as a sleeping berth is found below, as are a marine head with standup shower, vanity and sink. Storage drawers are all locked behind a latticed teak door. On deck, freshwater rinses for cameras and dive gear are standard features as are

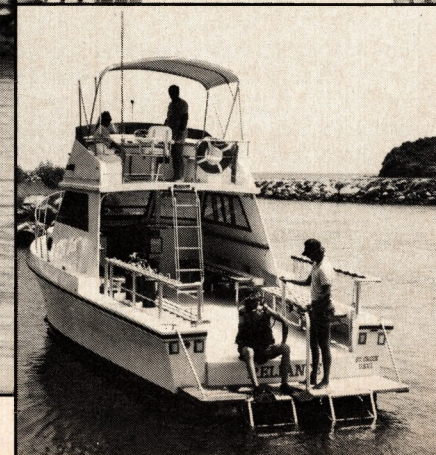
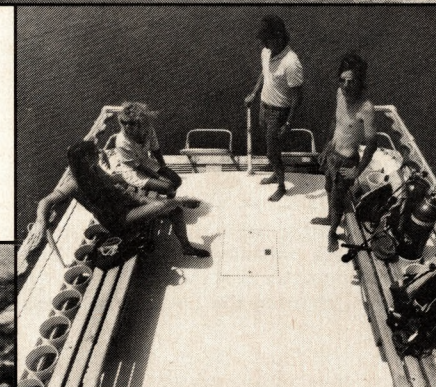
(Continued on Page 145)

DIVE BOATS

DELTA 38

TEXT AND PHOTOGRAPHY BY GREG JOHNSTON

The Delta 38 has a large, open deck, storage cabin that doubles as a sleeping berth, fully equipped bridge cockpit and teak dive platform. The modified V-hull offers stability and the low transom allows easy water access.





SHERWOOD SILHOUETTE BC

BY JIM WALKER

Silhouette—one definition begins like this: "to remove nonessential ... details...." That's just what Sherwood has done with the Silhouette buoyancy compensator; it's bladderless, with an emphasis on fit, function and comfort.

The Silhouette BC is made of tough 420 denier nylon with urethane bonded to the inside. The nylon gives the material puncture resistance and durability and the urethane makes it water and airtight. Thus, no inner bladder is necessary. This makes rinsing the inside of the BC easier and decreases the chance of salt crystals building up there.

The cut of the Silhouette is also designed for efficiency. Overall, it fits close to the body to reduce drag underwater. The shoulders are open for unrestricted movement. This also allows a drysuit

The Silhouette BC from Sherwood is bladderless and has a comfortable cummerbund waistband and quick-release shoulder straps.

Turn your love of diving into a career.

The world's finest dive stores and resorts are asking for diving instructors from the PADI International College Gold Curriculum. The college's reputation for quality education has made its graduates the most asked-for professionals entering the industry. In fact, at any given time the college has over 450 openings for its graduates to choose from.

To find out how you can turn your love of diving into a professional career, contact the Dean's office.

There's never been a better time.

(800) 223-8697 (CA)

(800) 235-3434 (U.S.)

(714) 540-7234

1234 E. Warner Ave.
Santa Ana, CA 92705

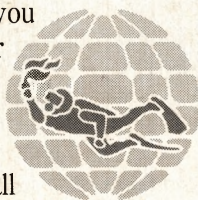


PADI® International College

Guaranteed Student Loans. Accredited by
NATTS. Courses approved for college credit
by the American Council on Education.

PADI diver courses now qualify for college credit.

The American Council on Education has determined that PADI courses, regardless of where they are taught, qualify for credit at colleges in the U.S. Talk with your PADI Instructor or Training Facility to find out how you may obtain semester-hour units for your PADI Open Water Diver, Advanced Open Water Diver, Rescue Diver, Divemaster or Instructor Development course. Get the credit you deserve. For a complete list of Training Facilities, contact: PADI, 1243 East Warner Avenue, Santa Ana, CA 92705, or call (714) 540-7234. Telex 678400 PADI INT SNA, FAX (714) 540-2609.



circle #116 on Reader Service Card

COCAINE & DIVING

skin diver

Tells all in the
November issue

Robert L.
Straight



• HOUSTON •



The Sea Symbols Collection - exquisite jewelry and sculpture by renowned artist Robert L. Straight. Catalog \$2.00
8439 Barkley Dr. Houston, Texas 77017 (713) 643-4051

SILHOUETTE BC

wearer easy access to a chest mounted inflation valve. The shoulder straps feature quick-release buckles. These allow a diver to don the BC without struggling to slip arms full of gauges through the shoulder openings. The shoulders are easily adjusted for a perfect fit.

The front of the BC is secured with an elastic strap with a quick-release buckle and the waist is secured with a padded cummerbund-style band. When wearing the BC and a tank above the water, the cummerbund helps distribute the tank's weight on the diver's hips instead of his/her shoulders.

The Silhouette features a combination manual/power inflator device attached via a corrugated hose to the left shoulder. Pulling down on this hose opens a dump valve at the shoulder. There is also an overpressure relief valve on the bottom right rear of the BC.

The Silhouette's plastic backpack has a carrying handle built-in as well as a flexible tank support brace. A series of grommets holes in the BC allow the backpack to be positioned at different heights for individual comfort. There is a flexible nylon webbing tank band that closes with a plastic buckle and is doubly secured with Velcro. A plastic sleeve on the band helps prevent tank slippage.

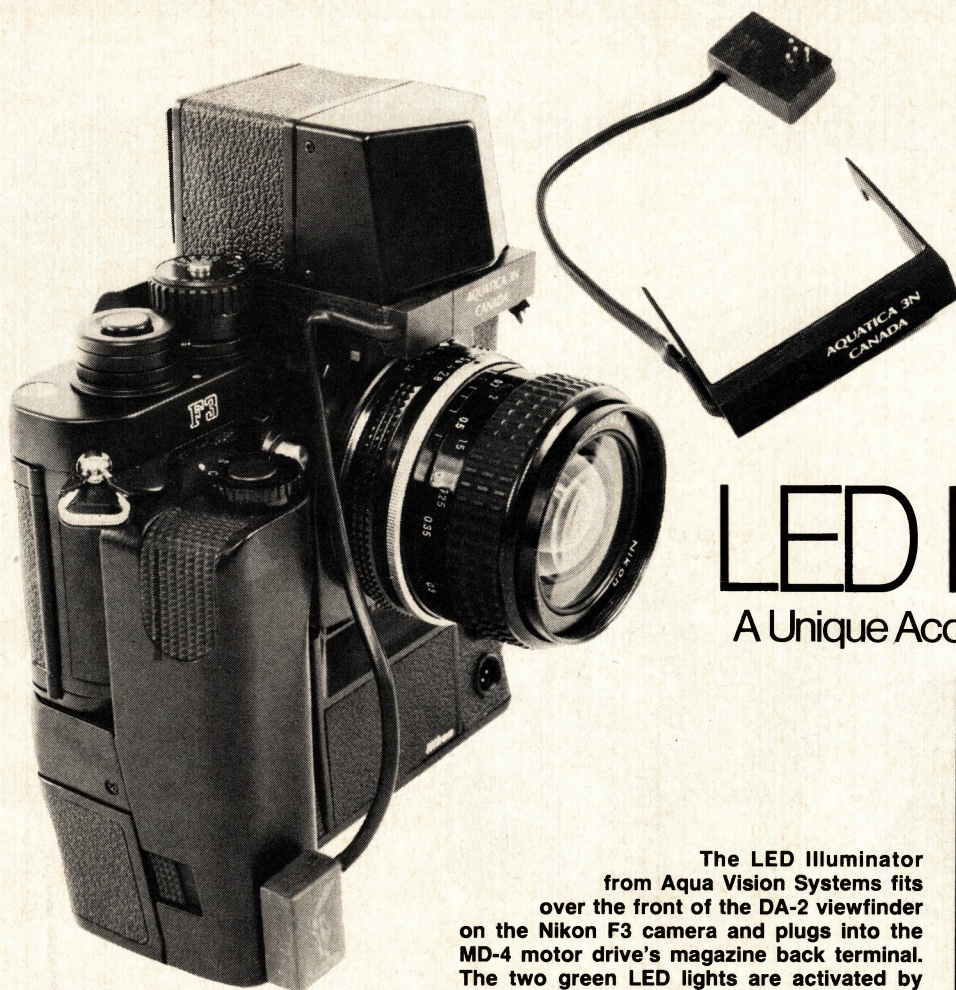
The Silhouette has Velcro closing pockets on both the left and right that serve dual functions. Each of these has separate compartments for stashing accessories and for holding an octopus second stage. Water drains quickly through large mesh panels. A large tab indicates which pocket holds the octopus, and by folding this under on the opposite pocket, a second accessory compartment becomes available on that side. The left accessory pocket has a plastic key clip sewn in and an optional CO₂ emergency inflator mechanism can be attached on this side.

The Silhouette has four large plastic D-rings sewn in; two of these are supported by nylon webbing straps extending over the cummerbund. There are Velcro closing hose guides on both shoulders.

The Silhouette BC—bladderless, rugged and full featured. It is available in extra small through extra large sizes. Colors include black with blue trim, black with red trim or lavender with pink trim. The suggested retail price is \$360. For the location of your nearest Sherwood dealer, contact Sherwood, 120 Church Street, Lockport, New York 14094.

DON'T SMOKE

Diving and smoking don't mix.



AQUA VISION'S

LED Illuminator

A Unique Accessory For The Nikon F3

The LED Illuminator from Aqua Vision Systems fits over the front of the DA-2 viewfinder on the Nikon F3 camera and plugs into the MD-4 motor drive's magazine back terminal. The two green LED lights are activated by slightly depressing the motor drive trigger.



TEXT AND PHOTOGRAPHY BY GERI MURPHY

If you use a 35mm SLR camera in a housing, you can appreciate the advantages and difficulties of through-the-lens viewing. Focusing, picture composition and action tracking can be superb. Yet, trying to read exposure data in the viewfinder in dim light can be frustrating.

Now Aqua Vision Systems of Canada has solved this annoying problem for Nikon F3 underwater camera systems. It has developed a special LED (Light Emitting Diode) Illuminator that clearly lights up the shutter speed and f/stop data for viewing through the speed finder. You can read the brightly lit numbers no matter how low the ambient light.

Aqua Vision Systems is the developer of the famous Aquatica 3 U/W housing. This is one of the finest all aluminum housings. It is configured to accommodate the Nikon F3 camera with the MD-4 motor drive and DA-2 Speed Finder.

With the Aquatica 3 system, an underwater photographer can shoot as many as six frames per second and use any of nine different Nikon lenses from an 8mm fisheye to a 200mm micro. External controls on the Aquatica 3 underwater housing include focus, aperture, shutter speed

and now, viewfinder data lighting.

The new Aqua Vision Illuminator consists of a metal bracket, two green LEDs and a 6 inch wire connector.

The metal bracket is designed to snap onto the front of the DA-2 viewfinder. Its two clips fit behind the slide buttons on the sides of the viewfinder.

The Illuminator is positioned directly above the TTL viewing aperture scale on the lens barrel. One of the LEDs lights the f/stops on the lens barrel while the other lights the shutter speed liquid crystal display (LCD).

The six inch connector wire runs down the front right side of the camera to a magazine back terminal on the bottom right side of the MD-4 motor drive. A four prong connector plug inserts into the terminal to make the connection. This terminal is not normally used underwater, as it is reserved for connection to Nikon's special 250 exposure magazine back.

Electric power for the LEDs comes from the motor drive batteries (eight AA alkaline cells). Activation of the LED Illuminator is achieved by slightly depressing the motor drive trigger button. The LEDs will remain on for about 15 seconds

before automatically shutting off.

We found the Aqua Vision Illuminator to be a most welcomed accessory for the Nikon F3 system. The exposure data is brightly lit yet the green glow does not blind you when you are trying to focus.

The Illuminator works beautifully in the Aquatica 3 housing, but is not necessarily limited to this housing alone. It would work just as well in any housing that accommodates the Nikon F3, MD-4 motor drive and operates the motor drive's trigger button.

The Illuminator also works very well out of the housing. If you use your F3 for land photography, the Illuminator is handy for indoor shooting, late afternoon shooting and other low light level situations.

The Aqua Vision Illuminator is an absolute must for all Nikon F3 underwater photographers. It can be installed in minutes and requires no tools. It uses very little battery power. This ingenious little accessory sells for only \$100.

For more information contact Aqua Vision Systems, Incorporated, 804-D Deslauriers St., Montreal, Quebec H4N 1X1, Canada. The telephone number is (514) 336-7051.

PACER

SDM SPECIAL SERIES ON REGULATORS



P DACOR PACER XLE 260

TEXT AND PHOTOGRAPHY BY ERIC HANAUER

When asked by their students for a recommendation on regulators, some instructors suggest buying the kinds used for rental at the local dive store. For many divers that makes pretty good sense. Rental models are the ones that can stand day to day abuse and always come back performing well, with minimal down time for overhaul and adjustments. They are usually not the highest performers and their simple design lacks some of the bells and whistles of more glamorous regulators. But, with recent design advances in the field, they can often outperform the top gun types of a few years ago. Such a regulator is Dacor's Pacer XLE 260.

At \$220, this is Dacor's least expensive unit with a metal second stage. That buys a lot of regulator. It has a new first stage that combines the best features of a piston and a balanced diaphragm. It has a wide diameter hose with one-half inch fittings. It has the proven XLE second stage, featuring the Venturamatic flow vane and an anti-freeflow device. You can even add

a plastic cover in your choice of eight Divecolors. Company spokesman Vern Pedersen predicted we would be impressed by its performance. He considers the 260 first stage a unique idea, that he wouldn't mind seeing at the high end of the line.

Dacor offers no less than 13 different regulators. This is achieved by matching five first stages with three second stages. (Not all possible combinations are offered for sale.)

Among the first stages, two are balanced piston models and three are balanced diaphragms. The higher numbered first stages (960, 950, 760) offer the convenience of extra ports and swivels. The 960 and the 360 have a Turbo Assist port that improves airflow to the primary second stage.

The XLE series comes with any of the five first stages. Its second stage has the XLE's brass housing, without the balanced valve and the external adjustment knob. The Pacer Aero series has a plastic second stage housing and also comes with any of the five first stages.

The heart of the XLE 260 is its new first stage. Dacor calls it a "combination" first stage because it combines the best features of a piston and a diaphragm. Essentially, it is a piston version of the 360, a balanced diaphragm design. The 260's piston has a large head, attached to a pushrod that extends into a high pressure balancing chamber to operate the seat. The same balanced pressure seat is used in the 360. In effect, the piston head acts as a diaphragm, and balance is achieved in a separate chamber instead of the flow-through method commonly employed in piston first stages. Fine tuning is accomplished (by authorized repair technicians) as in a diaphragm unit, by turning a screw. The advantage of this setup is that the metal piston head is not affected by temperature changes as a rubber diaphragm is. Therefore, intermediate pressure remains constant despite thermoclines or other temperature fluctuations.

Although the 260 has no swivel, position of the hoses can be controlled

by turning the first stage body on the yoke when mounting it on the tank. There are three low pressure ports and one high pressure port. Because the diameter of the low pressure ports is one-half inch, adapters would be needed to fit conventional three-eighths inch hoses found on non-Dacor low pressure inflators and octopus hoses. For divers who need a fourth port, a double outlet swivel is available that can be attached to any of the 260's low pressure ports.

Dacor uses several strategies to enhance airflow to the diver. One is the wider, one-half inch diameter hose, which increases flow volume to the second stage and reduces turbulence. Just remember, with these hoses the smaller ($\frac{7}{16}$ inch) fitting is for the high pressure attachment. Standard hose length is only 26 inches, which could be a bit short for some divers. An alternative is to order the optional, 39 inch octopus hose.

XLE second stages offer three unusual features to further improve breathing ease and reliability. The Venturamatic flow vane, an extension of the demand lever, lowers and disperses the airstream to prevent surging and uncontrolled venturi. Inside the mouthpiece tube is a curved baffle that allows water to enter and flow to the back of the diaphragm when the regulator is out of the mouth. This equalizes pressure and stops any freeflow within a few seconds. The third feature consists of dual silicone exhaust valves, coupled with an up-swept exhaust manifold, that create easier exhalation.

On the left side of the housing is an

access port that allows service technicians to adjust and fine tune cracking effort without disassembling the second stage. A large plastic storage clip is packed with the regulator. This fits over the purge button, keeping it depressed and relieving pressure on the downstream valve seat. The manufacturer recommends the clip be installed whenever the regulator is not mounted on a tank.

In these days of plastic second stages, Dacor still favors chromed brass housings. But, if fashion is a high priority, a plastic cover can be bought (to replace the metal one) in a choice of eight colors: red, white, light blue, royal blue, pink, yellow, orange or black.

MBC, an environmental consulting firm, provided its vessel, *Westwind*, for our evaluation of the XLE 260. Vern Pedersen was right. This simple, entry level unit is the equal of many regulators with higher pretensions. It breathes smoothly and easily, delivering high air volume without fussiness. The anti-freeflow device really works. When I removed it with the mouthpiece up, the Pacer freeflowed slightly for three to five seconds, then stopped. When dropped to a vertical position, the freeflow stopped within one to two seconds. Many high performance models will continue flowing until turned down or until the mouthpiece is blocked off with the diver's finger or tongue.

A little bit of air escaped in the head down position on descent, and also whenever I relaxed the seal of my lips on the mouthpiece. Slowly sipping air resulted in low cracking effort accom-

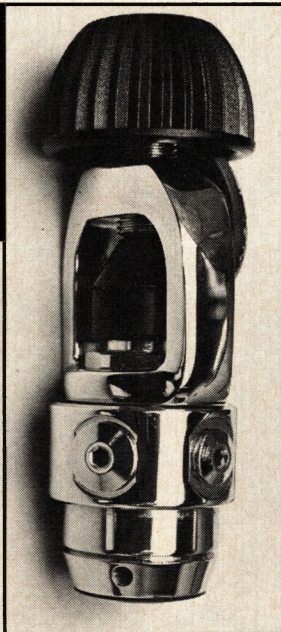
panied by a smooth, stepless airflow. Hard breathing was accompanied by a slight spray of water, more evident when my head dropped downward. In the normal swimming position with my head lifted forward to see, the spray decreased. Maximum leakage and minimum flow occurred when I was on my back, looking toward the surface.

Exhalation and purging were both very easy, probably owing to the dual exhaust ports. Pushing the purge button results in a medium volume flow, which gets the job done as well. Overall, I would rate the 260 XLE as an easy breather with a natural feel. It held its own in comparison with my expensive reference model until nearing the maximum recommended sport diving depth. Even at that point, the 260 XLE supplied plenty of air with no significant restriction. Divers will especially appreciate its calm demeanor, minimizing embarrassing freeflow.

From a service point of view, George Garrison of National Scuba, Huntington Beach, California, calls it "... a slick little unit ... that meets a need ..." for a good, low priced regulator. He pointed out that the balanced piston requires no break-in, unlike a diaphragm, and that service and repair are easy.

It's my guess that Dacor's Pacer 260 XLE will see a lot of rental service because of its low price, simple design and good temperament. For an entry level diver, or someone on a tight budget, the \$220 price tag makes it an attractive package. Check it out at your local dealer or for information contact Dacor, 161 Northfield Road, Northfield, Illinois 60093.

The first stage of the Pacer XLE 260 (right) combines the best features of a piston and diaphragm mechanism. It has no swivel but hose position can be controlled by turning the first stage body at the yoke when mounting it to a tank. The XLE 260's second stage (below) has a chrome plated brass housing and features an access port where a service technician can adjust the cracking effort.



PACER XLE 260

First stage:

TypeSolid piston
with balance chamber
Maximum pressure3,300 psi
MaterialsChrome plated
brass body
Neoprene seat
High pressure portsOne, $\frac{1}{4}$ "
Low pressure portsThree, $\frac{1}{2}$ "
Intermediate pressure140 psi
Environmental protectionOpt.

Hose length26"
Second stage:

TypeDownstream, lever action
MaterialsCase and cover
chromed brass
Diaphragm and two
exhaust valves: silicone
Mouthpiece: silicone
Seat: neoprene
Options availablePlastic cover in
eight colors
Octopus with 39" hose
WarrantyLimited lifetime
Price\$220

Divers Unite!

WIMP DIVER Is Back!

Once Again You Can Become
A Member Of **WIMP DIVER!**
Be Proud, Be Brave, Be A **WIMP DIVER!**



MEMBERSHIP INCLUDES:

- Wimp Diver T-Shirt
- Membership Certificate
(Suitable for Framing)
- Bumper Sticker
- Membership I.D. Card

Send check or money order
for only **\$12⁹⁵**

TO: **WIMP DIVER INC.**
7154 N. University Drive
Suite 253
Fort Lauderdale, Florida 33321



Enclosing **\$12⁹⁵** Make Me A "WIMP DIVER"

T-Shirt Size S M L XL

Name - Print Clearly

Address

City/State/Zip

Capture Your Dive Vacation On Underwater Video

skin diver

Shows you how to do it
in the November issue
On sale 10/27

SCUBA CLAUS™ CARDS



Can't wait to receive the new color catalogue? Order the SPECIAL HOLIDAY SAMPLER containing one of each of the 12 cards now available - Christmas, birthday, get well, and note cards.

New in this year's catalogue are color photos of all products and a new price structure including quantity discounts and individual prices on cards. VISA and MASTERCARD now accepted.

To order the sampler, send \$5.95 + \$2.00 shipping and handling. Please add an additional \$1.00 for shipping if you have a post office box or an address to which UPS cannot deliver. Kentucky residents add 5% sales tax on the sampler price.

Captured Moments Photography®
The Underwater Greeting Cards Company
1730 Normandy Road
Lexington, Kentucky 40504-2225
(606) 278-5309

OUT • OPEN • CUT CLOSED

One Handed In 4 Seconds



MARINER comes in a double tooth serrated or straight edge blade. Hand honed stainless steel for marine use. Lasting sharpness, uncommon cutting on rope, leather, etc. Will cut a 5/8" manila line in a single swipe. Easily clips to pocket, rain gear. Opens to lock position. A state of the art classic. You won't be disappointed! Specify right- or left-handed. Choose from five models at your cutlery dealer or write today. The best pays for itself! U.S. and Foreign Patents.



Dept. SD 187 P.O. Box 800 Golden, Co. 80402

OCTOPUS

(Continued from Page 25)

the mantle. Below the eyes and forward of them is a muscular tube called a siphon. Water is drawn in from under the mantle cavity where it passes over the gills, which extract oxygen from it. The water is discharged through the siphon. The entire body of the creature seems to pulsate as it inhales and expels water.

Branching out from around the head are eight supple, elastic-like arms that taper to slender tips. The underside of each arm is lined with a double row of closely spaced muscular disks that act like suction cups. The octopus uses its eight arms for many activities including walking, climbing, gripping, probing and catching food.

The octopus has an amorphous body and can change shape, color and texture in seconds. Since the creature has no internal skeleton it can flatten its body and slip between cracks, shrivel up into a small ball or inflate its body to the size of a football. All of these "plastic-man" aberrations are a form of defense.

The octopus expresses its emotions by changes in color. Under normal daylight conditions an octopus will generally assume a color pattern similar to its background. An opalescent blue-green is often shown during the night. When it is frightened, it will often turn a blotchy black and white. When angered it may turn a rusty red. When extremely agitated, the skin may become rigid with little horns rising up like warts. If it chooses to camouflage itself against a white sand bottom, the octopus can turn pure white. The creature has an infinite number of color combinations and patterns.

The octopus often exhibits a variety of locomotion methods. It can sometimes be observed walking across the sandy bottom on the tips of the tentacles, disturbing hardly a grain of sand. In many cases it seems to slither or glide across the coral reef, moving partly by its arms and partly from a gentle jet from its siphon. When frightened, the octopus will rapidly contract the mantle to force a stream of water out through the siphon. This enables it to zoom off like a rocket with arms trailing behind.

Perhaps the most fascinating aspect of the octopus is its intelligence. Curious by nature, this creature will often stop what it is doing to observe the movements of a diver. If not frightened or molested, the octopus can be coaxed into taking food. It feeds primarily on shellfish and crustaceans, especially crabs. This creature also has the ability to solve problems such as pulling a cork out of a container to get at the food inside.

With patience and a small food offering, the octopus can be coaxed into close

PROTON-2



The ultimate in metal detection technology!

Extreme sensitivity for ferrous metals. Almost every major wreck in 20 years, has been located with a Proton magnetometer. The Fishers Proton 2 is made for underwater salvage work and will operate for months without adjustment. LED readout pinpoints wrecks accurately. • Low cost • 800' range • Shipped ready to go • Two year warranty. \$4,350.00



For technical and price information write for our free catalog.
J.W. FISHERS MFG. CO.
ANTHONY ST. TAUNTON, MASS. 02780
(617) 822-7330 CALL COLLECT FOR INFO.

circle #118 on Reader Service Card

Your Greatest Videos! Tropical Reefs. Ocean Waves.



Whitewater Fun. Powder Skiing. EWA Video Housing.

You can capture fascinating underwater reef scenes or fantastic shots in the surf with your Camcorder. The EWA video housing will let your video camcorder join you on the slopes, on the water, while camping or fishing and underwater to a depth of 30 feet.

The EWA Video Housing is a very rugged flexible, transparent camera housing. High-pressure tested, with an absolutely water and airtight closing rail and built-in optical glass lens.

Worlds most sold camera housing, reliable German workmanship. Available for most camcorders and still cameras.

Available in Photo, Dive and Video stores.

ewa-marine

INFORMATION:
1-800-257-7742
in NJ (609) 854-2424



Pioneer Marketing & Research, Inc.
216 Haddon Ave., Westmont, N.J. 08108

CANADA: STEINER OPTIK CANADA, INC.
500 Ouellette Ave. Ste. 505 Windsor, Ont. N9A 1B3 (519) 258-7263

circle #119 on Reader Service Card

contact with the diver. It is a most rewarding experience when a totally wild octopus responds in this manner and communication is established.

Should you encounter an octopus on one of your dives, treat it with respect and kindness. It is one of the gentlest and most wonderful creatures found in the ocean. 🐙

GINNIE SPRINGS

(Continued from Page 35)

basins. There are hot showers at the large bathhouses nearby. There are picnic tables, a covered pavilion, a volleyball court, canoe and inner tube rentals and nature trails. The owners consider Ginnie not so much a dive resort as a "place to have fun." In fact, only about one-third of the 80,000 visitors a year are divers. The river banks and the entire property are heavily wooded and filled with wildlife, including deer, turkeys, panthers, armadillos, opossums, squirrels, hawks, owls, woodpeckers and egrets. Ginnie Springs is a place where you can commune with nature, have fun with the family, go fishing or diving, explore, or just get away from it all and relax.

For more information call or write Ginnie Springs, Route 1, P.O. Box 153, High Springs, FL 32643; (800) 874-8571, (904) 454-2202 in Florida. Or, contact Quality Inn, P.O. Box 608, Alachua, FL 32615; (904) 462-2244. 🐙

CELEBRITY SKI CRUISE

Scuba divers can explore the Caribbean's finest dive spots during the third annual Celebrity Ski Cruise. Those who aren't yet divers, but would like to be, can enroll in a course run by Boulder Scuba Tours and receive full SSI certification. The course includes on board instruction, one pool dive and five reef dives.

The cruise, on Norwegian Caribbean Lines' M/S *Starward*, is scheduled for November 8-15. The ship sails at night, leaving daytime to enjoy the watersports available at the six destination ports: Martinique, St. Thomas, St. Maarten, Barbados, Antigua and San Juan. There's also windsurfing, golfing, snorkeling, tennis, sailing and relaxing in the sun.

The third annual Ski Cruise is sponsored by Sport Stalker and Norwegian Caribbean Lines. Arrival and departure are at San Juan, Puerto Rico, November 8 and 15. The price includes round trip air fare from most major U.S. airports.

For more information contact Eileen Allen at (800) 525-5520 nationwide or (800) 332-5530 in Colorado. The address is Sport Stalker, P.O. Box 775128, Steamboat Springs, Colorado 80477. 🐙

Christmas Gift Guide

Shop
November

skin diver

NAUI

Presents

Finding a Better Way

AN INTERNATIONAL
CONFERENCE ON
UNDERWATER EDUCATION

November 6-9, 1987

Rancho Santiago College
(Santa Ana Campus)
Santa Ana, California

- Pre- & Post-show events
- Seminars, workshops, competitions
- New NAUI programs, products, services
- Awards ceremony
- Special events
- Divers' Swap Meet
- Diving trips, socials, family activities
- A major film show!

*Space is Limited!
Register Now!*

NAUI IQ-87



Headquarters
P.O. Box 14650
Montclair, CA 91763
(714) 621-5801

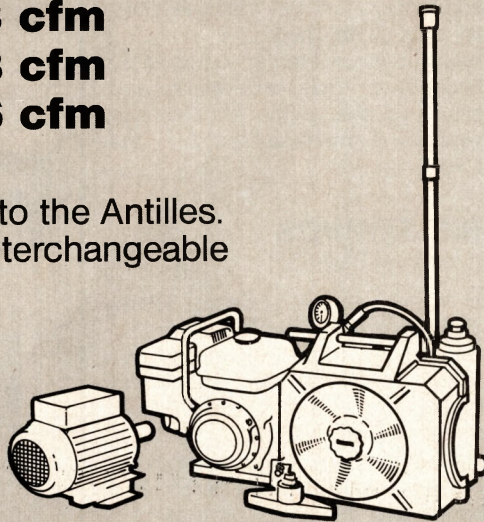
circle #120 on Reader Service Card

PORTABLE DIVE MODELS

BAUER
COMPRESSORS

VARIUS 2.3 cfm
PURUS 2.8 cfm
UTILUS 10 3.6 cfm

Proven from Alaska to the Antilles.
Motor and engine interchangeable
without tools.
Telescopic intake.
Triplex purification
for your safety
and health.



Bauer Compressors Inc. 1328 Azalea Garden Road
Norfolk, VA 23502 · Phone: 804-855-6006 · Telex: 823-403

circle #121 on Reader Service Card

THE INFLATABLES

Achilles

TEXT AND PHOTOGRAPHY
BY GEORGE COZENS

In the last exciting episode on inflatables, the Achilles SD-156 was the featured hero. This month its cousin, the Achilles SK-140, takes the spotlight. It is the second of 39 models of inflatable boats from Achilles that have been reviewed recently by SDM and one of three in the SK line, which the manufacturer calls its "Black Magic" series. Although a little smaller than the SD-156, the SK-140 appears to have the necessary attributes of a true warrior. It is tough, versatile and ready for aquatic battle. Despite its small 14 foot size and light 194 pound weight, the SK-140 can handle a squad of as many as six troops and a total payload of almost one ton. If the troops should be replaced with divers, this craft can perform just as well. However, the number of people might be reduced to, perhaps, four, for moderate to long trips, especially if a lot of equipment is taken.

The Achilles SK-140 is basically quite similar to the SD-156. In fact, there are really only two major differences, besides the size. Whereas the SD-156 is available in red or gray, the SK-140 comes only in traditional black—great for nocturnal commando operations, but probably a little warm to the touch during boating activities on a bright summer day. The second difference is in the floorboards: The SD series of Achilles boats comes with standard wooden floorboards, while aluminum floors are available as an option; the SK series boats are only available with standard, self-locking aluminum floorboards. If black bothers a prospective buyer and might be an obstacle to

The SK-140 is 14 feet long (outside) and weighs only 194 pounds. It can handle outboard engines from 10 to 50 horsepower.



Treasure

Brought To You By White's PI 1000

This is a Sophisticated Underwater Pulse Induction metal detector. It is easy to use, guaranteed to depths of 200 feet, and gives both an audible and visual target indication.



- Excellent Sensitivity for Coins, Rings, and Relics made of Gold, Silver, and Other Metals.
- Compare the PI 1000 Series 2 to Underwater Detectors Costing Twice the Price!

\$499.95

FREE CATALOG
AUTHORIZED DEALER
TOLL FREE: 1-800-547-6911



1011 Pleasant Valley Rd.
Sweet Home, OR 97386
Dept. SD-4

DEALER INQUIRIES INVITED

INTERNATIONAL CONTACT POINTS
White's Electronics Intl., Ltd.
13 Harbour Rd.
Inverness, Scotland IV1 1RY

circle #122 on Reader Service Card

Diving in the Great Lakes Region?

Visit the Great Lakes Institute of Hyperbaric and Diving Medicine! Previously reserved for diving instructors and public safety agencies and recovery units, the Institute is now open to the recreational diving public. It has an air ambulance and three HBO chambers, including a 72-inch multi-place unit able to reach 10 atmospheres. You can meet the air rescue team trained in diving medicine, as well as hyperbaric specialists with up to 15 years of experience in treating diving accidents. Our diving resource library is one of the most comprehensive in the region.

Also available:

- 24-hour care for all diving injuries and illnesses
- Commercial and sport diver physical exams tailored to the needs of the individual or group

- Educational center for holding programs and seminars
- Facilities available for hyperbaric research

For more information or
for a brochure, call
(616) 341-7778
or write to



Great Lakes Institute of
**Hyperbaric
& Diving
Medicine**

A division of
Bronson Methodist Hospital
252 East Lovell, Kalamazoo, Michigan 49007
A member of the Divers Alert Network (DAN).

circle #123 on Reader Service Card

SK-140 Tough and Versatile



The SK-140 can carry two to four divers and their gear, including extra scuba tanks.

further consideration of the SK-140, then the almost identical twin, the SD-140 with optional aluminum floorboards, could be the ticket. Except for color, the SK-140 and the SD-140 are the same, including the total price.

Materials and construction used in the SK-140 appear to be of the same high quality as those in the earlier SD-156 model. The tube materials start with a heavy duty fabric made from 840 denier nylon, which is given a tough outer coat-

ing of Hypalon and two inner coatings of neoprene. This combination gives the tube material strength, flexibility, airtightness and excellent resistance to the elements. In forming the tubes, pieces of material are bonded together at the seams with a full one inch wide glue line. The industry standard, according to Achilles, is just one-half inch. These seams are then covered inside and out with seam tape. The fiberglass reinforced plywood transom is permanently bonded

to the aft tubes with multiple layers of fabric. More of this same tube fabric is used to form gussets that span the quadrants between the top of the transom and the aft tube sections. These gussets reduce the amount of prop splash entering the boat. As standard equipment, a large engine mounting plate is secured to the transom to protect it from the damaging effects of engine clamps. It is designed to help prevent the engine from slipping off should the clamps work loose. Another protective measure is the heavy rubber rubbing strake that extends all around the outboard edge of the tubes. This acts like a bumper when the boat is tied alongside a dock or hard hull boat.

Other convenient, standard features that add to the SK-140's safety and versatility include: a small splash guard that runs along the tops of the tubes—the aft two-thirds of this guard on each side also serve as lacing cuffs for the lifelines; four molded rubber lifting handles; a fifth handle on the inboard starboard tube for the helmsman's use; a stainless steel towing ring/carrying handle at the bow; two additional stainless steel towing rings mounted low on the tubes just aft of the bow; seven D-rings fastened to the tubes inboard where they are available for equipment tie-downs; a removable bow-dodger, with its own support bar; a self-bailing bilge drain; large, removable infla-

(Continued on Page 147)

THE COLLEGE

FOR DIVING INSTRUCTORS AND DIVEMASTERS Personalized Career Development and Training

NAUI College is growing rapidly by following a simple formula

1. Actively recruiting bright and ambitious students.
2. Providing exacting educational standards.
3. Creating enjoyable, challenging learning opportunities in a variety of formats, geographical settings, and time parameters.
4. Respecting the needs of each individual student through highly personalized educational and career counselling.
5. Constantly encouraging alumni to help build diving as a professionally promoted and taught - safe, fun activity.

NAUI COLLEGE A COMMITMENT TO EDUCATIONAL EXCELLENCE

Please send General and Admissions information.

Name _____

Address _____

City _____ State _____ Zip _____

NAUI National Association
of Underwater
Instructors College
27402 Camino Capistrano, Suite 103
Laguna Niguel, CA 92677
in CA 714-582-0186 Collect
CA Res. Call Toll Free 1-800-227-6663
Outside CA 1-800-423-7095 Toll Free

Simply
good service.



20 years experience
sending divers world-wide.
Call us & see why our
satisfied divers keep
coming back.

ADVENTURE EXPRESS

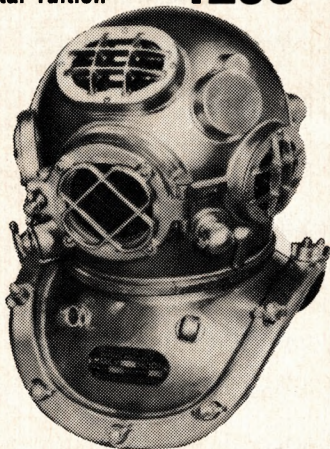
185 Berry Street #5503
San Francisco, CA 94107
Telex 239446
800 443-0799
415/442-0799

circle #126 on Reader Service Card

Cooks • Vanuatu • Solomons • Caribbean • Fiji • Papua New Guinea • Thailand • Truk • Palau • Solomons • Bahamas • Tahiti • Galapagos • Australia • New Caledonia • Fiji • Cooks • Vanuatu • New Caledonia • Palau • Truk

BECOME A PRO DIVER

For The Lowest
Total Tuition - **\$1295⁰⁰**



Join Our Next Class - 11½ Weeks Course
Learn All Phases of Diving - In Our 38th Year

Coastal School of Deep Sea Diving
320 29th Avenue, Oakland, CA 94601
(415) 532-4211 SD-107

For full details and application form
enclose \$3 U.S. for handling and postage.

Name _____
Address _____
City _____
State _____ Zip _____

circle #117 on Reader Service Card

STAN WATERMAN WINS SECOND EMMY

At this year's Emmy Award banquet the diving community was well represented. Stan Waterman, his son Gordy Waterman and Howard Hall all received Emmys for their underwater cinematography on three different productions for the PBS series, 3-2-1-Contact. For Stan, it was a second Emmy.

In production this year by the veteran cinematographer is a film on diving in Guadalcanal and the Solomon Islands and a new hour special for Audubon and the Turner Network on sharks. This last is being coproduced by Stan and Howard Hall with Peter Benchley narrating. Waterman will also be guest of honor at the annual International Underwater Film Festival in Brighton, England.

YMCA SCUBA PROGRAM

The YMCA of the USA has expanded its scuba program to include all areas of aquatics and competitive swimming. The headquarters for this total program will remain in Norcross/Atlanta, Georgia.

The aquatic program includes swimming courses and lifeguard training with other specialized certifications in spring-board diving, water fitness, skin diving, aquatics for special populations, pre-school and synchronized swimming.

The integration of aquatics and competitive swimming with scuba will enable the YMCA of the USA to coordinate promotional and program efforts and respond collectively to the needs of instructors and local YMCAs.

NEW SAN DIEGO BOAT

Scubasaurus is the name of a new dive charter boat running out of Mission Bay in San Diego. The boat will make regular one-half day dive trips to such popular locations as the kelp beds at La Jolla and Point Loma and the wreck of *El Rey*. *El Rey* is only a few minutes' boat ride from the *Scubasaurus*' dock. The boat also makes full day trips to the Coronado Islands. Snacks and beverages are supplied on the local trips, lunch is provided on the full day Coronados trips.

Scubasaurus is 22 feet long and carries a maximum of four passengers. It is equipped with a single Volvo Penta engine, 24 mile radar, a chart recorder depth finder, VHF radio and stereo. The owner, Ed Mohler, has 25 years of experience in diving and boat operation and a 100 ton ocean operators license. "Safety is my motto," states Ed.

For more information on *Scubasaurus*, call (619) 429-9942.

Save On DIVE PACKAGES

at



Spanish Cove
Grand Cayman

Spectacular Prices!

Double Occupancy

7 Nites from \$679 per person

Quadruple Occupancy

3 Nites from \$237 per person

Additional package plans available

Tax and Service charge additional

All Packages include:

**Deluxe air conditioned
accommodation,**

Unlimited off-shore diving,

Morning 2-tank boat dives daily,

Breakfast every morning of diving,

**and Use of tanks, air, back packs,
weights and belt.**



**HOSPITALITY WORLD
LIMITED**

in association with **Scuba Tours Inc.**

**Toll Free 800-526-1394
New Jersey (201) 256-9115**

circle #127 on Reader Service Card

SHOOT THE REEF!



with
Chris Newbert
Renowned Marine Life
Photographer, in
Australia...

Departure: November 14, \$2295 includes transfers, hotel accommodations, tour and 14 day live-aboard.

also featuring:

- FIJI \$1500
- PAPUA NEW GUINEA \$1575
- TRUK & PALAU \$1500
- PHILIPPINES \$1800
- RED SEA, M/Y *Fantasea* \$1300
- RED SEA LAND SAFARI \$1000
- AUSTRALIA \$1575

**Call us it's FREE
1-800-544-DIVE**

International Diving Expeditions

USA: 6380 Wilshire Blvd., Suite 1715
Los Angeles, CA 90048 • (213) 655-5225
EUROPE: El Mundo Adventure Travel, Inc.
A-8020 Graz, Idlhofgasse 9, Austria
Phone (0316) 961144, Telex 311316

circle #128 on Reader Service Card

90 MINUTES OF BOTTOM TIME: ANYTIME.

THE WONDER OF THE DEEP AWAITS YOU IN SEA FANS VIDEO MAGAZINE.

SEA FANS is the only quarterly, 90-minute video magazine for divers and non-divers alike. Our team of diving professionals explores the world's great dive destinations, interviews noted dive personalities, features underwater photo clinics with world-class photographers, and offers information on marine life, equipment and techniques.



Hosted by sport-diver Jimmy Ibbotson of the Nitty Gritty Dirt Band, each issue provides you and your friends with hours of repeat viewing pleasure.

VISIT DIVE LOCATIONS AROUND THE WORLD; GET THE MOST CURRENT INFORMATION ON EQUIPMENT AND TECHNIQUES.

SEA FANS touches your imagination with dive locations you've visited or want to visit. It also regularly provides you with informative marine life close-ups, photo clinics and equipment highlights.

GO ON A VARIETY OF DIVE EXPERIENCES.

- Dive the great walls from Palau to Little Cayman
- Florida's crystalline springs and caverns
- Waltzing sea lions in the Sea of Cortez
- Coral bejeweled wrecks of Truk Lagoon
- Slide through marine gardens from Bonaire to Ponape
- Photo clinics with Chris Newbert, Stephen Frink, and Howard Hall
- Plus marine life close-ups on angel fish, reef sharks, and clown fish

SEE & SEA TRAVEL



FREE TRIAL!

Subscribe today and we'll rush you the first issue of your subscription and bill you. If not satisfied within 15 days, return your copy with no obligation. You'll further your diving adventures with your own SEA FANS video library. Subscriptions:

1 year, 4 issues, \$99.95; 2 years, 8 issues, \$169.95. Single issues also available at \$29.95 each. Available in local dive stores, or

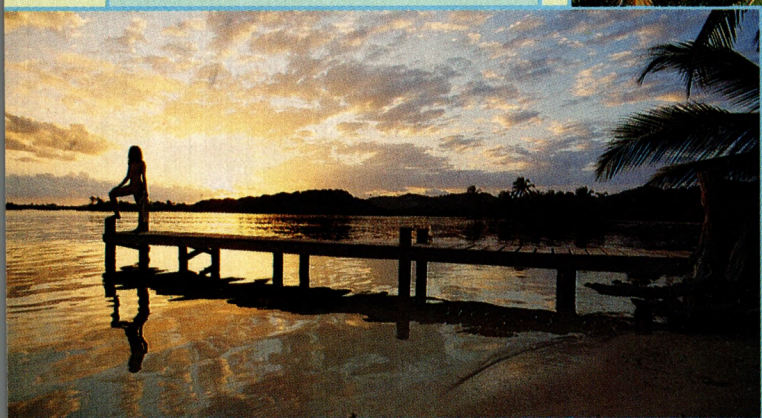
ORDER DIRECT; CALL 1-800-622-8767



SEAFANS™
VIDEO MAGAZINE

7800 East Iliff, Suite E, Denver, Colorado 80231 U.S.A.

The Bay Islands of Honduras are verdant and mostly undeveloped. The diving environment is rich and relatively unexplored. The fringing reef is continuous and close to shore. The underwater scenery is characterized by mammoth and unusual discoveries. There is a fairyland of clefts, canyons and tunnels.



BAY ISLANDS

EMERALD ISLES OF THE WESTERN CARIBBEAN

TEXT AND PHOTOGRAPHY BY RICK FREHSEE

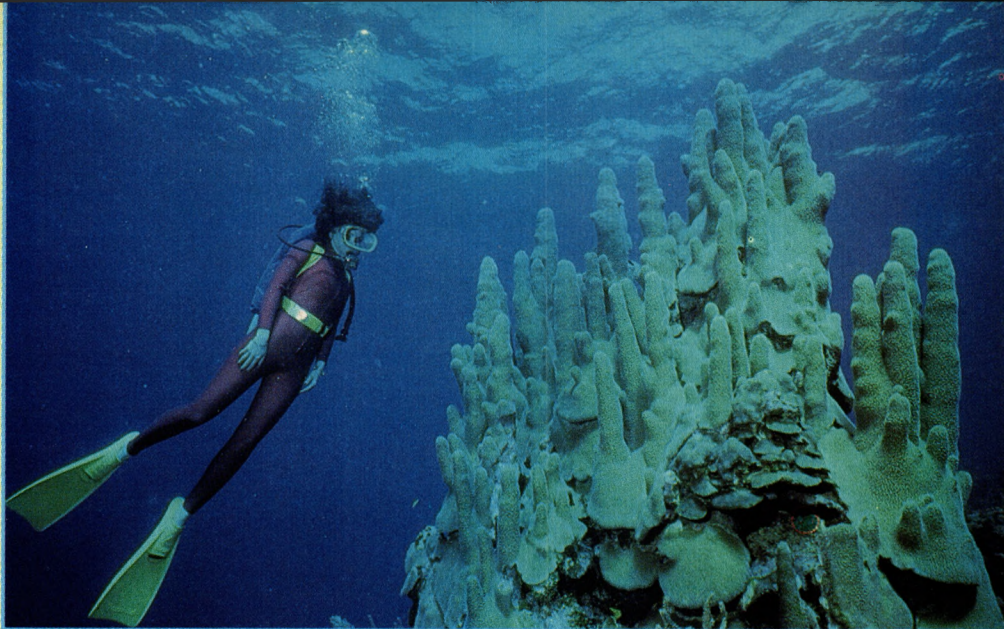
The mountainous islands of Roatan, Guanaja, Utila and their sister cays—collectively known as the Bay Islands of Honduras—are among nature's most beautiful tributes in the Caribbean. Here, in addition to offering an extensive, even remarkable diving environment, is a small group of islands that will evoke images of everyone's tropical exotica: verdant, mostly undeveloped and dropped like emerald dollops in a turquoise sea.

The Bay Islands are the sunken remains of a mountain range in northern Honduras, the continuation of the great Caribbean barrier reef that is generally regarded as the second largest in the world. Those who know Cozumel or Be-

lize will have an idea of the quality of the diving you can expect in the Bay Islands. Now, combine that with the lush, tropical topside scenery of Jamaica or Martinique and you know there is a real treat awaiting visitors.

The diving environment is quite rich and has been little explored. In most places the fringing reef is continuous and often a short distance from shore. Drop-offs are prevalent and precipitous, usually falling from shallow depths into an abyss 6,000 feet below. The diving area is extensive and the dive resorts only a few. The result is that you never feel crowded. There is no TV (except for VCRs, no traffic and barely any commer-





Although the Bay Islands are primitive, a handful of excellent, well-run dive resorts blend into the beauty of the natural surroundings. In addition to large U/W formations, Bay Islands diving offers walls, reef and pelagic fish and incredible stands of pillar coral. A trip to the Bay Islands is like peeling away 20-30 years from the known Caribbean: There are miles of wilderness diving.

cialism or development. The weather is so predictable there are no local weather reports (the resorts monitor Radio Belize). On Guanaja there is not yet a single road or stretch of pavement—you get around by water taxi.

Although the Bay Islands are primitive, readers can be assured of a handful of excellent, well-run dive resorts. There are no high-rise hotels but the resorts are incredibly attractive, relying mostly on the beauty of the natural surroundings to complete the mood. They vary in size from the 44 room sprawling, plantation-style Anthony's Key to the diminutive but beautiful 10 room Bayman Bay Club. The others fall somewhere in between.

The meals are very good and characterized by an abundance of seafood and continental cuisines served from home style to approaching gourmet. There is an emphasis on island cuisine and local fruits and vegetables wherever possible. Accommodations may be regarded as uncomplicated but not sterile. The rooms or bungalows quite often overlook breathtaking scenery and provide a refuge for the senses so well stimulated by a tropical presence.

The reason the Bay Islands do not yet attract the numbers of Cayman or Cozumel is primarily owing to the lack of direct air routes. There is good indication of a new airport that will open toward the end

of this year on Roatan. However, I would not wait. Go now, while you can still "discover" these pristine islands. Places such as the Bay Islands are special and will no doubt become rarer in the future.

Tan Sahsa, the major Honduran air carrier, flies modern 727 and 737 jets from Miami, Houston or New Orleans into San Pedro Sula, then onto La Ceiba and Roatan. LACSA flies a stretch 727 from New Orleans, New York City and Los Angeles into San Pedro Sula. Guests transfer to Isleña Airlines for the flight to the Bay Islands.

Bay Islanders recognize their connection with Central America but there is no hint of conflict or political turmoil offshore.

BAY ISLANDS



Roatan, Guanaja, Utila and their sister cays are the tips of sunken mountains off northern Honduras. They offer a remarkable diving environment.

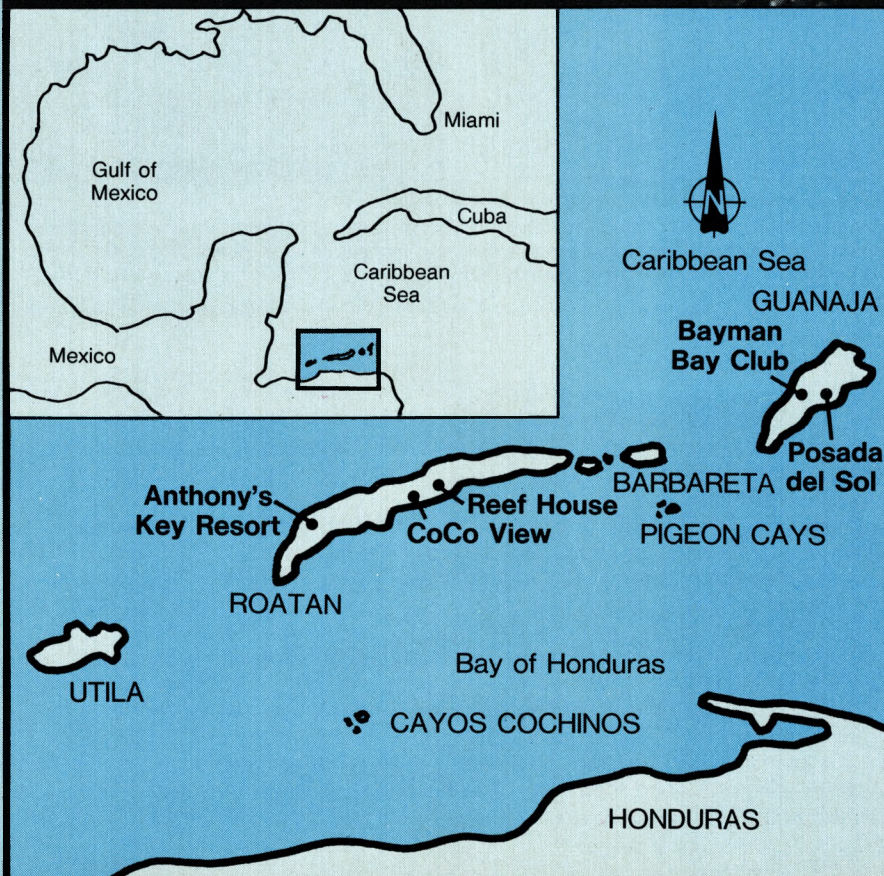
AIRLINES

LACSA

2002 20th Street, Suite B104
Kenner, LA 70062
(800) 225-2272
Flies to San Pedro Sula from Los Angeles, New Orleans and New York City with connecting flights to the islands on Isleña Airlines

Tan Sahsa

P.O. Box 52-2222
Miami, FL 33152
(800) 327-1225 (in U.S.)
(800) 432-9818 (in FL)
(800) 452-7589 (in LA)
Flies to San Pedro Sula then to La Ceiba and Roatan from New Orleans, Houston and Miami



In fact, travelers are quite safe in any part of Honduras accessible by commercial jet. I recently completed an extensive photographic assignment in Honduras. It is a very beautiful and friendly country. I continue to make about four trips a year to Honduras and the Bay Islands.

The history of these islands is more closely linked to England than to Spain. The aboriginal inhabitants were Paya Indians who carried on trade and commerce with the Maya on the mainland. The first European visitors were explorers, pirates, pioneers and adventurers, primarily from England and Scotland. The first permanent village was the black Carib settlement (Punta Gorda), which remains on the north coast of Roatan. A substantial number of Cayman Islanders migrated to the Bay Islands in the mid 1800s. Today's population consists mostly of seamen, fishermen, farmers and traders. The official language is Spanish but English is the main language spoken everywhere. The people are bright, friendly and humorous. The economy is stable.

The Bay Islands underwater environment is characterized by mammoth scenery and unusual discoveries. During the last Ice Age, when sea level had receded by 300-400 feet, these islands were larger and more area was exposed. Then as now, they were incredibly green and hilly. River run-off carved huge notches in the sloping ridges leading to the sea. Today, these bay and river notches have created an underwater fairyland of clefts, fissures, canyons and tunnels. Divers are surrounded by huge walls and swim-throughs often leading to canyons of cathedral proportions.

Another aspect of the big picture underwater is the proximity of shallow reef areas to the walls and drop-offs. In most areas, the fringing reefs are mounted on a fairly narrow platform that leads quickly to deep water. In other areas, where an underwater pinnacle or seamount comes close to the surface, a bank reef is permitted to grow, resulting in shallow coral surrounded by deep water. The net result for divers is the continuous mix of reef life with pelagic or deepsea varieties. It is not uncommon to see mackerel, kingfish, bonita, wahoo, goggle-eyed jacks and spotted eagle rays cruising the reefs of Roatan or Guanaja.

The soft and stony corals are well developed and almost every species is found at every dive site. There are statue-like stands of the comparatively rare pillar coral at nearly every site and some stands are the most impressive found in the Caribbean. Another benefit of the shallow walls is that black coral, large deepwater fans and colorful sponges are found within 60-80 feet of the surface. In

Bay Islanders recognize their connection with Central America but there is no hint of conflict or political turmoil offshore.

YOU ARE INVITED TO FEED THE FISH...

for further information, contact:
HONDURAS INFORMATION SERVICE
501 FIFTH AVENUE, SUITE 1611
NEW YORK, N.Y. 10017
(212) 490-0766 (212) 683-2136

Don Arturo Rendon Pineda would like to invite you to feed the many species of tropical fish in the beautiful Bay Islands of Honduras. Don Arturo should know, because not only is he the Minister of Culture & Tourism for Honduras, but he also lives there ... and dives there!

BAY ISLANDS

some areas the wall is as shallow as 30-40 feet. Standout wall diving specimens include azure vase sponges, white chalice sponges and seaweeds with bright yellow polyps.

The macro life is also well represented in the Bay Islands. Divers often encounter bunches of blue bell tunicates, a variety of cleaning shrimp, a frothy green and yellow nudibranch and a large, spiraled tube anemone. Night divers often search successfully for the orange ball anemone

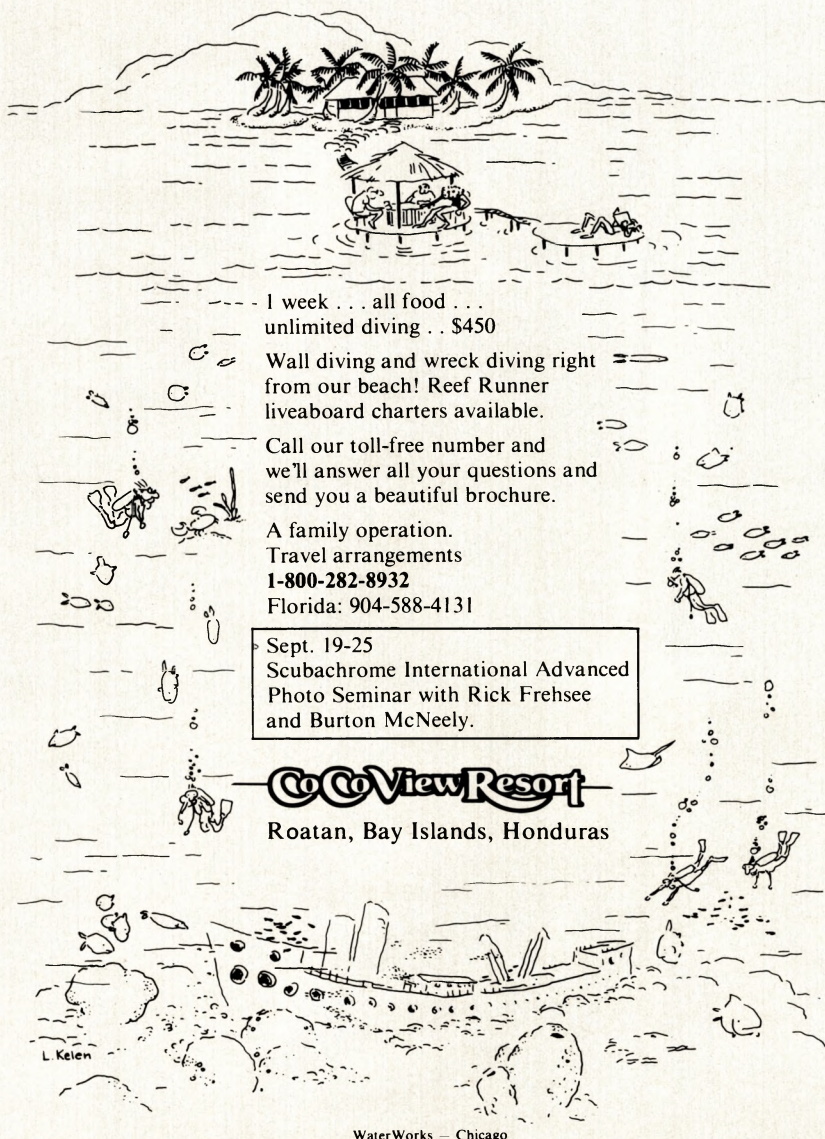
and the flying gurnard. Reef fish and groupers are fairly abundant in most areas. The tiger grouper and indigo hamlet are found here as often as they are in any other Caribbean spot. Garden eels are found close to every dive resort and a continuous parade of either blue chromis or creole wrasse is a common wall spectacle. At mid-depth reef sites, pairs of French angelfish, yellow coneys, numerous spotted drums and many royal grammas can often be found and photographed. Several divemasters have reef sites where the pugnacious-looking frogfish makes its home.

Divers looking for a real first may be fortunate enough to see a whale shark in

the deep waters next to Bay Island reefs. In several locations this past year, recently at West End, near Anthony's Key and in front of the CoCo View resort, this largest of sharks was sighted. Positive proof of the whale shark encounter was captured on videotape at AKR. Mantas and huge schools of eagle rays are also reported, though infrequently.

There are a couple of helpful hints that will ensure a successful Bay Islands adventure. The first has to do with a nasty rumor going around that one Bay Island resort has a bad problem with sand gnats—the "no-see-ums" or "flying teeth" of the tropics that put all those little red welts on divers' bodies. I hear this rumor occasionally, but the name of the resort usually changes. Actually, it has nothing to do with "where," but rather "when." Almost anywhere in the tropics, if you have had rain and the wind dies or changes direction, you might anticipate bugs. The solution to the problem is easy—trade your cologne or perfume for a big bottle of insect repellent. Apply the

Our front yard is a wreck, and a beach, a sun deck, a 110 foot wall . . .



1 week . . . all food . . .
unlimited diving . . . \$450

Wall diving and wreck diving right
from our beach! Reef Runner
liveboard charters available.

Call our toll-free number and
we'll answer all your questions and
send you a beautiful brochure.

A family operation.
Travel arrangements
1-800-282-8932
Florida: 904-588-4131

Sept. 19-25
Scubachrome International Advanced
Photo Seminar with Rick Frehsee
and Burton McNeely.

CoCo View Resort
Roatan, Bay Islands, Honduras

L. Kelen

WaterWorks — Chicago

BAY ISLANDS RESORTS

Anthony's Key Resort

Roatan, Bay Islands
Honduras
U.S. Contact:
1385 Coral Way, Suite 401
Coral Gables, FL 33145
(800) 227-DIVE
(305) 858-DIVE

CoCo View Resort

Roatan, Bay Islands
Honduras
U.S. Contact:
P.O. Box 877
San Antonio, FL 33576
(800) 282-8932 (outside FL)
(904) 588-4131 (in FL)

Reef House Resort

Oakridge
Roatan, Bay Islands
Honduras
U.S. Contact:
P.O. Box 640399
Kenner, LA 70064
(800) 341-1950 ext. 73
(504) 467-2949

Bayman Bay Club

Guanaja, Bay Islands
Honduras
U.S. Contact:
801 SE 16th Court, #2
Ft. Lauderdale, FL 33301
(305) 525-8413
(800) 524-1823

Posada del Sol

Guanaja, Bay Islands
Honduras
U.S. Contact:
171 W. Blue Heron Blvd.
Rivera Beach, FL 33404
(800) 642-DIVE
(305) 848-DIVE

This is Anthony's Key

Seductive and tantalizing Anthony's Key Resort. What appears to be a Gauguin painting is really the most beautiful seclusion for divers and dreamers in the world. Natural wood bungalows spill along a verdant hillside and across a palm-studded islet. A small dory transfers guests over a blue lagoon to the hillside restaurant.

Aboard a custom dive boat you have a choice of one, two or three single-tank dives per day. There are two boat night dives per week and the crystal bay invites you to enjoy unlimited shore diving.

Learn about the gentle art of underwater photography (E-6 processing daily) or schedule your own underwater video produc-

tion. Later in the week our West Bay Picnic will treat you to fabulous Tabiyana Beach – one of the most beautiful coastal scenes in the Caribbean.

Topside, there is horse-back riding, windsurfing, sunfish sailing, canoeing, blue-water fishing and a casino and lounge for dancing.

Write or call today for details of a 7-night visit to paradise.



AKR and Photo Roatan
present the official

NIKONOS TECHNIQUE SEMINAR

Improve your standard, close-up, macro and wide-angle photography. Special tips and strobe-lighting, composition, marine subjects, modeling and preventative maintenance made possible in part through the support of Nikon Inc.

Dec. 12-19, 1987, Feb. 6-13,
April 16-23, Sept. 12-19, Dec. 3-10, 1988



*Stunning pillar coral formation
5 minutes from AKR dock.*

*The finest dive resort
in the Western Caribbean*

Anthony's Key Resort

Roatan • Bay Islands • Honduras

1385 Coral Way, Ste. 401
Miami, FL 33145

1-800-227-3483 (DIVE)
National toll free

1-305-858-3483 (DIVE)
Florida direct



BAY ISLANDS

lotion liberally *before* you are bitten!

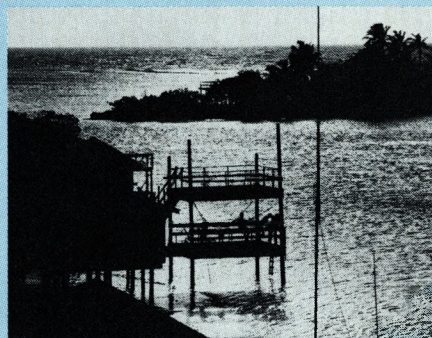
Next, pack your camera, some dive and personal items in your carry-on luggage. At the height of the season the air carriers often utilize all passenger and baggage space. If your baggage is delayed for a day or two, you will have the important things with you.

There is really no best or worst time to travel to the Bay Islands. There is one short rainy season around the middle of October and a few days each winter month may be lost to a cold front or "norther." About every ten years a hurricane will blow by close enough to uproot a few trees. In other words, the weather is as good and as consistent as most anywhere in the Caribbean.

Bay Island divemasters are not "show-boats." They are very friendly but quiet and often socialize only among themselves. The best hint I can give you for photography or sightseeing is to make friends with a local divemaster and get him to tell you about his wonderful world. Many of them have been diving for ten years or more and have much information on personal sites to share with you. Most of my better Bay Islands photographs were the result of a recommenda-

tion from a local divemaster. People such as Doc at CoCo View, Dennis at Anthony's Key, Bo at Bayman Bay and Tino Monteroso at Posada del Sol have contributed immensely to my photographic successes.

What to do when you are not diving is absolutely no problem at all if you can do



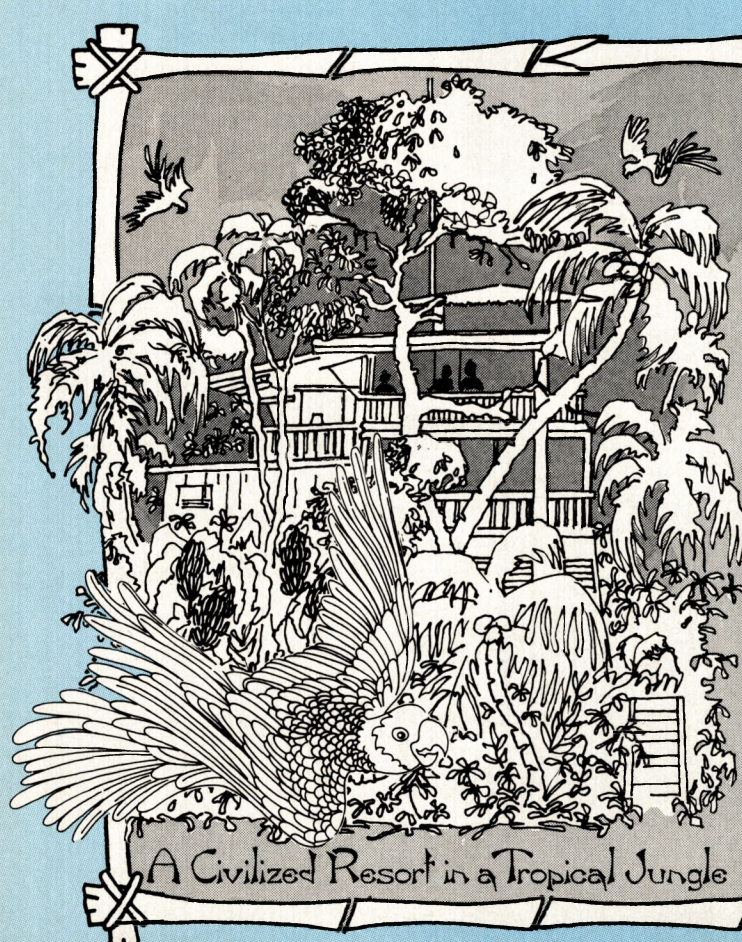
The Bay Islands display an unencumbered way of life devoid of high-rises, swim-up bars, floor shows or serious shopping.

without glitz and glitter. Last year there were just more than 6,000 visitors, mostly divers and adventurous tourists. The Bay Islands display an unencumbered way of life devoid of high-rises, swim-up bars, floor shows or serious shopping. Instead, think of a Caribbean with a thousand shades of green and blue punctuated by creamy white beaches and, occasionally, a palm-thatched bungalow. Take an is-

land trip by car (Roatan only) or by boat. Visit a Carib Indian village (Roatan). Climb a waterfall (Guanaja) so beautiful it will take your breath away. Go horseback riding (Roatan) or visit a whole town suspended on stilts (Guanaja). Several resorts offer a land/sea package that will put you aboard a sailboat or motorboat—for half your stay—to explore reefs and islands miles away.

Perhaps the most interesting side trip available from any Bay Island resort is to the Maya center of Copan on the Honduras mainland. Built during the late classic period, Copan shows the talent of the Maya artisans and stone cutters at the height of their artistic achievement. Highlights include the intricate hieroglyphic stairway and many stelai—huge stone tablets—out nearby in the round. Visitors will find themselves stimulated by the peacefulness of jungled woodland and thrilled by the monkey faces, skulls, priests and rulers, old men and women, and strange composite animals hewed out of stones. It's well worth a day trip on your way back home.

The five major dive resorts reviewed here are in keeping with the services that readers expect in other areas of the Caribbean. All are deserving of your attention depending upon the size and atmosphere. Every resort has made additions or improvements to its photo and/or video program since our last Bay Islands re-



A Civilized Resort in a Tropical Jungle

BAYMAN BAY CLUB

Guanaja, Bay Islands, Honduras

The Best Value in Dive Travel

Individual cottages with ocean view
Private beach/windsurfers/sunfish
New 40' custom dive boat
6 days/7 nights

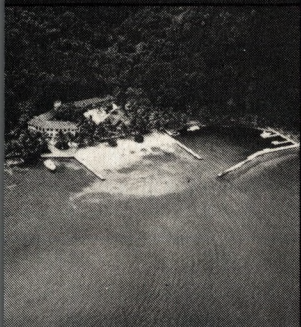
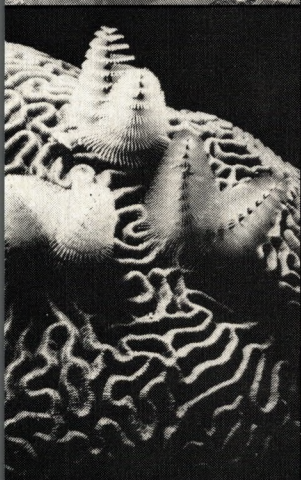
two boat dives per day • unlimited shore/reef diving
one boat night dive • 3 meals daily
mid-week sunset cruise • picnic boat dive outing
Sat. night disco in Bonacca

595⁰⁰ Dec./May 525⁰⁰ June/Nov.
non-divers 455⁰⁰

1-800-524-1823
Call or write Today!

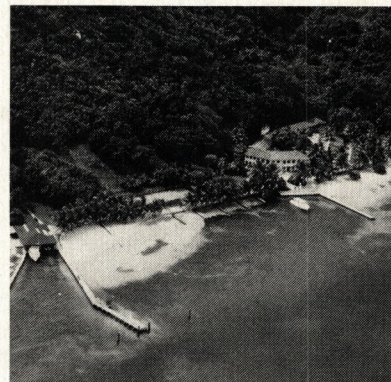
Bayman Bay Club U.S. Office

1 Isle of Venice-206, Ft. Lauderdale, FL 33301
(305) 525-8413



POSADA DEL SOL GUANAJA BAY ISLANDS

OVER 50 DIVE SITES (AND WE'VE JUST BEGUN TO EXPLORE)



This is Mother Nature at her best

Imagine an island... of pineclad mountains and lazy white sand beaches fringed with palms; a lost island where orchids grow wild and fresh water streams from natural mountain springs; a peaceful island surrounded by an unexplored barrier reef, cooled by a soft breeze and washed by a sapphire sea.

A magnificent Spanish villa

Posada del Sol on the island of Guanaja is a magnificent Spanish villa that stands proudly on 62 acres of oceanfront tropical greenery. There are two beaches, a freshwater swimming pool, tennis court, even an exercise studio and all of our beautifully appointed rooms have ocean views. You will be welcomed and served by our "friendly, smiling and always helpful staff."

50 spectacular dive sites and we've just begun to explore

Come dive with us. We're exploring our part of the second largest barrier reef in the world. Whether you enjoy "aquarium" dives, swimming through caves and grottoes of colourful coral, exploring an underwater volcano or the adventure of big fish encounter we will please you. And we dive 365 days a year!

Our Staff Has Over 100 Years of Combined Diving Experience.

- 42' diesel dive boat
- 36' diesel dive boat
- 25' dive boat (private charters)
- 50 CFM compressor
- 20 CFM compressor
- 30,000 cf. ft. air storage
- Video equipment
- Photo equipment
- Freshwater swimming pool
- Charter fishing

Call Posada del Sol now: 1-800-642-DIVE

305-848-3483 1-800-226-DIVE (Florida)

INN OF THE SUN

circle #132 on Reader Service Card

171 W. Blue Heron Blvd., Riviera Beach, FL 33404



BAY ISLANDS

port. E-6 processing is generally available and both Nikonos and video rentals are now more common. Check with the individual resort for an update on photography/videography as equipment is changing rapidly.

A trip to the Bay Islands is like peeling away 20-30 years from the known Caribbean. Divers looking for an unspoiled, undeveloped Caribbean will be delighted with miles of wilderness diving and healthy, well-developed reefs. You might have to go halfway around the world to find a more exotic or tropical location.

ANTHONY'S KEY RESORT

Small in comparison with most island resorts, Anthony's Key is the largest and most popular dive resort in the Bay Islands, and for good reason. It's hard to find anything but praise for all aspects of AKR above or below the sea. Topside, AKR looks like a Gauguin painting with 44 bungalows spread across a coconut-studded cay and a verdant hillside. Underwater, it has some of the best diving available in Roatan. An incredible 95 percent of AKR visitors plan to return.

The dive operation is also the largest in the Bay Islands and has always been well

managed. Dive operations director, Dennis Anderson, oversees five mid-sized dive boats that visit 35 known sites within 15-30 minutes of the resort. AKR also has the only full-service photo processing facility in the Bay Islands. New photo pro, Mathis Weatherall, is in charge of photo

In most areas of the Bay Islands, the fringing reefs are mounted on a fairly narrow platform that leads quickly to deep water.



The Perfect Connection to the BAY ISLANDS

USA and CANADA toll free
1-800-225-2272

Lacsa
The Airline of Costa Rica



and video instruction, E-6 film development and the repair and rental program. Four to six official one-week Nikonos technique seminars are offered during the year at no extra charge. AKR is the only small resort in the Nikon program.

Mandy Wagner, who has spent nearly eight years on Roatan, has returned as the popular and capable hotel manager. Among other desirable additions to AKR's program, Mandy has designed a wonderful island-style pig roast on the cay once each week, complete with mariachi band. A fun and frolic dive/beach day spent at Tabiyana Beach is an AKR staple. Tabiyana is everyone's version of the perfect fantasy beach.

For an island without any structured night life, it's a little odd to consider that there is a casino at Anthony's Key and a party lounge for dancing, etc. It all seems to work together quite nicely with the casino. This latter is a respectable walking distance from the resort, avoiding any interference with the island's natural mood.

AKR's best dive sites include **West Bay Wall** and **Herbie's Special**, two of the best wall dives in the Bay Islands and the spectacular pillar coral site a few minutes from the resort. Topside specials include horseback riding, bluewater fishing, and a cultural island tour. New this year is the *Lusanda*, a 52 foot custom sailing yacht that features day trips and

sunset cruises along Roatan's virgin northern shore. Anthony's Key continues to be the leader in size, amenities and services in the Bay Islands, without losing its personal touch.

COCO VIEW RESORT

CoCo View is characterized by excellent beach/wall diving and a downhome charm second to none in the Caribbean. Owners/managers Bill and Evelyn Evans and dive operations manager, Doc Radowski continue to run CoCo View in the best tradition of a family business with everyone, including CoCo View guests, considered part of the family.

The resort, small and perched on the end of a sandy peninsula on Roatan's south shore, is perfectly positioned for truly uncommon beach diving. One would have to look hard and long to find better wall diving than what you find a short snorkeling distance from CoCo View's front porch. On the way out, to further seduce you, is the wreck of the *Prince Albert*, one of the few real wreck dives in the Bay Islands.

CoCo View now has two mid-sized boats to handle the 30 or so divers who can now visit it. This resort was the first in the Bay Islands to install permanent mooring systems along the coastline. Besides the 17 moored dive sites, there are

another 20 or so that provide an almost unlimited dive experience. CoCo View continues to get better each year with constant physical improvements. This year there is a beautiful little gazebo at the end of a wooden dock. A sun deck and a swimming/training channel complete the front porch view. Attesting to the quality of the diving and the service at the resort is the fact that CoCo View is currently the second largest dive resort in the Bay Islands.

Notable dive sites at CoCo View include the **East** and **West Wall** beach dives, the **Prince Albert** shipwreck, the stunning sponge-lined walls of the **Valley of the Kings** and the spectacular canyons at **Mary's Place**, arguably the best single dive site in the Bay Islands. CoCo View also features a motor sailer for surf and turf combos—one-half or full week sail/dive cruises to the **Cochinas Cays**.

REEF HOUSE

Reef House has the distinction of being the oldest of the Bay Islands dive resorts currently in operation. This is no accident: It is indeed a house on a reef—which is to say that if diving from the resort were any easier, it would have to be afloat.

Sitting on a reef flat in front of the township of Oak Ridge on Roatan's south coast, the Reef House offers a mix of reef

The Skin Diver's Airline . . .



Serving The Bay Islands
Honduras

from

Houston ● New Orleans ● Miami

Ask about our
Special Baggage Allowance
for Diving Equipment

Tan Sahsa

"THE INTERNATIONAL AIRLINES OF HONDURAS"

USA Reservations & Information: 1-800-327-1225
Florida 1-800-432-9818

BAY ISLANDS

rides aboard a mid-sized custom dive boat and unlimited beach diving to near-by well-formed reefs and walls.

Accommodations are clean, comfortable and nicely furnished island style. They have a combination of glass doors and wooden shutters and are set into three wings. Meals—up to 20-30 at a time—are served in the main dining room at the back of the east wing.

Hank Hind is the veteran divemaster and he is very familiar with Roatan's south coast. The diving is both memorable and varied. Reef House is close to famed Mary's Place and also features **Calvin's Crack** as one of its very best wall dives. This is another example of one of the many huge reef fissures often found on both sides of the island.

Reef House is also positioned for day trips to **Barbareta Island** and the **Pigeon Cays**. The Barbareta wall is impressive and barely explored. In front of the island, the Pigeon Cays are palm-studded sandspits—perfect for picnicking, snorkeling or swimming. The off-shore circulation in this area generally produces some of the best visibility in the Bay Islands. Huge groupers and a mix of reef and bluewater life can be expected.

Topside day trips include an outing to Punta Gorda—today's version of a black Carib village—Port Royal—an authentic pirate lair—and a small boat trip through mangrove canals behind Oak Ridge.

BAYMAN BAY CLUB

They just don't get more intimate or more beautiful than the Bayman Bay Club, on Guanaja's lush northern shore. BBC has upped its rooms from 5 to 10 bungalows, making it possible to host 20 divers at a time, but it is still the smallest active dive resort in the Bay Islands. Visitors often walk about the wooden pathways to and from the *Robinson Crusoe*-looking mainhouse in a daze, as if they've entered a dream world.

Owner/builder/part-time manager, Tom Fouk, built this little Eden of natural wood and, in the process, barely disturbed the surrounding forest. Besides dreamers and lovers, divers began to discover BBC one-half dozen years ago and a steady stream of them has been finding its way here ever since.

The dive area ranges along the entire northern coastline with occasional trips made to the south shore. Guanaja, sometimes described as the most beautiful of the Bay Islands, has a good selection of dive sites in all four quadrants. The most distinctive is probably the volcanic caverns at **Black Rock**. Bo Bush, the pleas-

ant and capable BBC divemaster, will be pleased to show you the winding canyons lined with pillow lava—evidence of the violent birth of now peaceful Guanaja.

BBC is currently under the management of Jay Stephens and assisted by horticulturist Helen Murphy. Helen has been busy giving nature a helping hand with wild orchids, pineapples and yucca plants on the resort grounds.

The dive operation is small but efficient with enough contingency equipment for guests. A roomy, mid-sized custom dive boat and a small back-up are available.

Guanaja also features a truly beautiful system of three waterfalls, one above the other, on the way up Big Gully. It's a little more than an hour's walk to the first one and well worth the effort.

POSADA DEL SOL

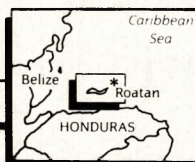
Posada del Sol is the newest entry among Bay Islands dive resorts and what a splash it has made. The resort has a breathtaking physical presence. Formerly the private hotel/estate of a reclusive millionaire, PDS looks like the \$6 million original investment was well spent. The Spanish/Mediterranean style villa rests on 1,600 feet of prime coastal waterfront. The 18 rooms are more than just pretty; they are superb. The main house contains a beautifully decorated dining room and the handsome lounge/club room. Behind, the plants and flowers surrounding the spacious wooden pool deck give it a country club appearance.

Owner George Cundiff and manager John Propeck are professional divers and totally committed to making PDS one of the greatest first-class dive resorts in the Caribbean. One example is the food, some of the best found at any of the Bay Islands resorts. Additionally, there are lighted tennis courts, an exercise room and a photo/hiking/jogging trail leading up the hillside behind the resort.

Tino Monteroso, one of the most personable and experienced divemasters in the Bay Islands, is in charge of dive operations. Tino's local knowledge and friendly demeanor has led the way to exciting and unusual discoveries below the sea. The southern side of Guanaja is protected by a series of offshore islets connected by an almost continuous barrier reef. Inside and outside locations provide a variety of underwater topography and a wide selection of dive sites. PDS has already set permanent moorings on many of the regular sites and new ones are being discovered weekly. The sites are numerous and distinctive with a variety of depths to consider. One of the most adventurous is **Devil's Cauldron**, an elongated reef-crested ridge that offers a drift dive through an unending parade of silvery, goggle-eyed jacks. Recent reports and some photographs support evidence of schooling groupers and sleeping bull sharks found periodically along several offshore sites. ➤

Unique!

Great diving, excellent food. Built on a small reef island. Unspoiled 300 foot wall dive from our protected ocean pool off our bar. 2 boat dives a day to the best dive sites on Roatan. Minutes away! Stay at a private 4 mile/island of Barbareta.



Sailing, fishing and other tours available.

Beautiful Roatan—Bay Islands



Plenty of Non-Diving Activities
"Come to an Underwater Fantasy"

The Reef House

—RESORT

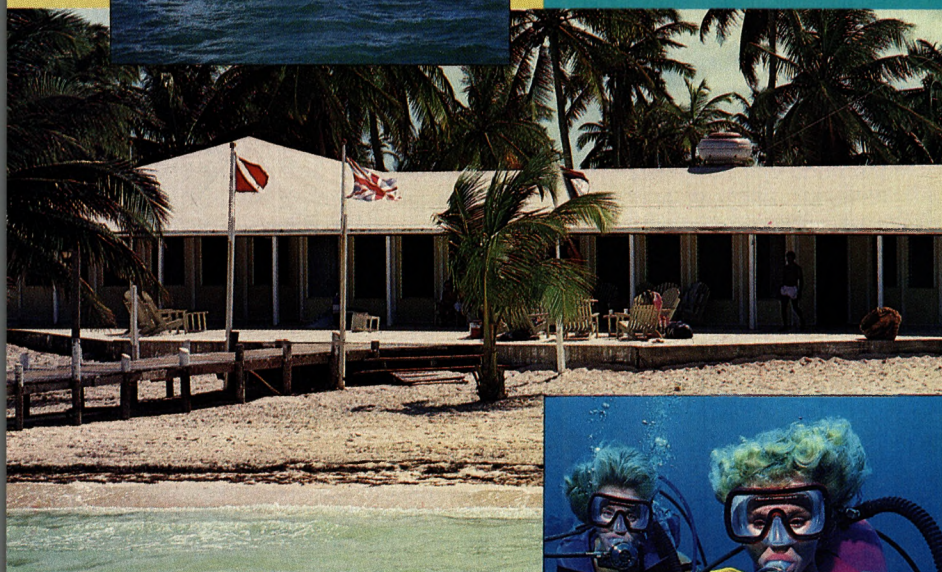
U.S. Booking Agency Call (504) 467-2949
Call Toll Free 1-800-341-1950 Ext. 73
P.O. Box 640399, Kenner, LA 70064

TRAVEL



PYRAMID ISLAND RESORT A Belize Discovery

TEXT AND PHOTOGRAPHY
BY GREG JOHNSTON



Each night, the tiny island ritual begins. From across the great blue Caribbean, the warm tropical breezes skip across the western sea, gently rustling the palm fronds of the thick grove of coconut trees. The evening soon rolls into a gray twilight that descends upon the surrounding sea, blanketing the warm sunset glow into darkness. Above, the black, velvet-like sky bursts with an extravaganza of a million blinking stars. At the end of the pier, the glimmer of a lone light casts an eerie emerald glow across the rippled water, while just offshore, the cast begins to assemble.

From the outer fringes of the glow-



Top: Pyramid Island Resort dive boats. **Middle:** Pyramid Island Resort and dock. **Above:** Divers examine a yellow tube sponge.

ing underwater arena, they first appear in formation. Seven large spotted eagle rays in search of their target—like fighter jets in the night. The lonely pier light plays a significant role in the nocturnal ritual—it is the spotlight for the nightly performance.

Nowhere else have I seen such a show. The rays pass under the wooden dock, coming within arm's distance of the surface, then glide into darkness. A moment later, they return, passing directly under the light. This strange phenomenon occurs every night in front of the Pyramid Island Resort, on the tiny island of Caye Chapel. I had an overwhelming urge to get into the water and swim with the rays, but good sense prevented me from doing so. After all, I had arrived just a few hours earlier and everything I had read about the undersea wilderness of Belize was already beginning to unfold into a tale of adventure.

The Belizean barrier reef in general, and Caye Chapel in particular, are the way the Caribbean is supposed to be—long, sun drenched beaches, crystalline waters and hundreds of miles of unexplored reefs. For the well traveled diver, the Belizean reef system offers an opportunity to dive where no one else has dived before. The barrier reef is the second largest reef system in the world and only a small fraction of the reefs have been explored. In addition to the barrier reef, there are several coral atolls and a mysterious blue hole.

Outside the barrier reef at depths of 50 to 100 feet, there are massive coral canyons formed by large ridges of coral growing up from the sandy bottom. These canyons, which run perpendicular to the shoreline, are deeply cut with coral tunnels and teeming with fish of every color. Schools of snappers, groupers, amberjacks, blue chromis and parrotfish patrol the

TRAVEL

reefs. Azure sponges of purple and snowball white dot the U/W mountains like little houses on an English countryside. The abundance of marine life along the main barrier reef is remarkable. It is not unusual to see a school of porpoises or huge turtles. The spotted eagle ray is often seen in groups of three or more and huge mantas are not uncommon.

Just outside the barrier reef, the western Caribbean Sea drops sharply to more than 4,000 feet. The offshore atolls—Lighthouse Reef, Glover's Reef and the Turneffe Islands—rise from the seafloor to within inches of the surface from vertical shafts of rock and coral. The coral walls that encircle the atolls are steep and begin in only 30 feet of water. The coral growth is as phenomenal as it is varied. Basket sponges are big enough to sit in; gorgonians are everywhere; tube sponges in neon shades of yellow and purple grow profusely among thick hummocks of black coral.

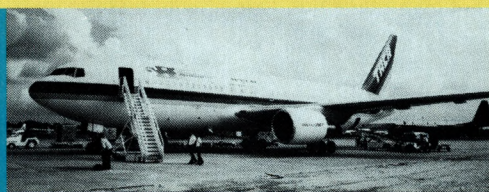
It wasn't until much later in the week I realized the true primitiveness of underwater Belize. When I asked our dive guide to name a few of his favorite sites, his reply was simply, "With so much reef, we never dive the same site twice, you never know what could be beyond that next coral ridge!"

The moving force behind the Pyramid Island Resort is owners Larry and Kathy Addington, who reside in Ashland, Kentucky most of the year. The resident managers and host for your week long adventure are Bob and Peggy Huffstutler. While Peggy spends much of the time running the resort, Bob, a PADI and NAUI instructor and U.S. Coast Guard licensed captain, spends his time guiding his guests through the coral wonderland.

The Pyramid Island Resort is the only development on the lovely former coconut plantation known as Caye Chapel. The tiny island is about three miles long, with an average width of about one-half mile. Unlike most of the mangrove islands along Belize's barrier reef, Caye Chapel has a beautiful white sand beach that runs its perimeter. The Pyramid Island Resort is at about mid-point of the island on the windward shore. At the south end of the island there is a mangrove lagoon excellent for spotting wading birds such as the white egret, osprey, great blue heron, roseate spoonbill and



Above: Island exploration aboard a motorbike. Sights include beaches, iguanas, parrots and Maya relics. Right: TACA Airlines 767 jet.



even an occasional flamingo. Manatees are common to this area and a pair of these sea cows can usually be seen frolicking in the warm shallows.

At the north end of the island there are sensuous beaches and a large grove of secluded coconut palms. Large iguanas can often be seen sunning themselves on the sandy roads, while wild parrots sing in the treetops above. A freshwater swimming pond is not far from the resort, offering an inviting alternative to the salty ocean. And, not far from the pond, are the remains of an ancient Maya Indian camp. Some pottery chips can still be found, suggesting early civilization on Caye Chapel. Evidence proves Spanish conquistadors often stopped at Caye Chapel to take advantage of the natural freshwater cistern. The resort has several Honda ATCs for guest use and it is fun just to ride off exploring the island from one end to the other.

The hotel has 32 comfortable beachfront rooms, each air-conditioned with private bath. There is a restaurant, TV lounge and conference center. Meals are a pleasant combination of familiar and island delights served in family style portions. The menu features fresh fruits and vegetables from the mainland as well as home-baked bread and native grown delicacies such as breadfruit, papaya, pineapple and bananas. Fresh seafood is a Caye Chapel specialty.

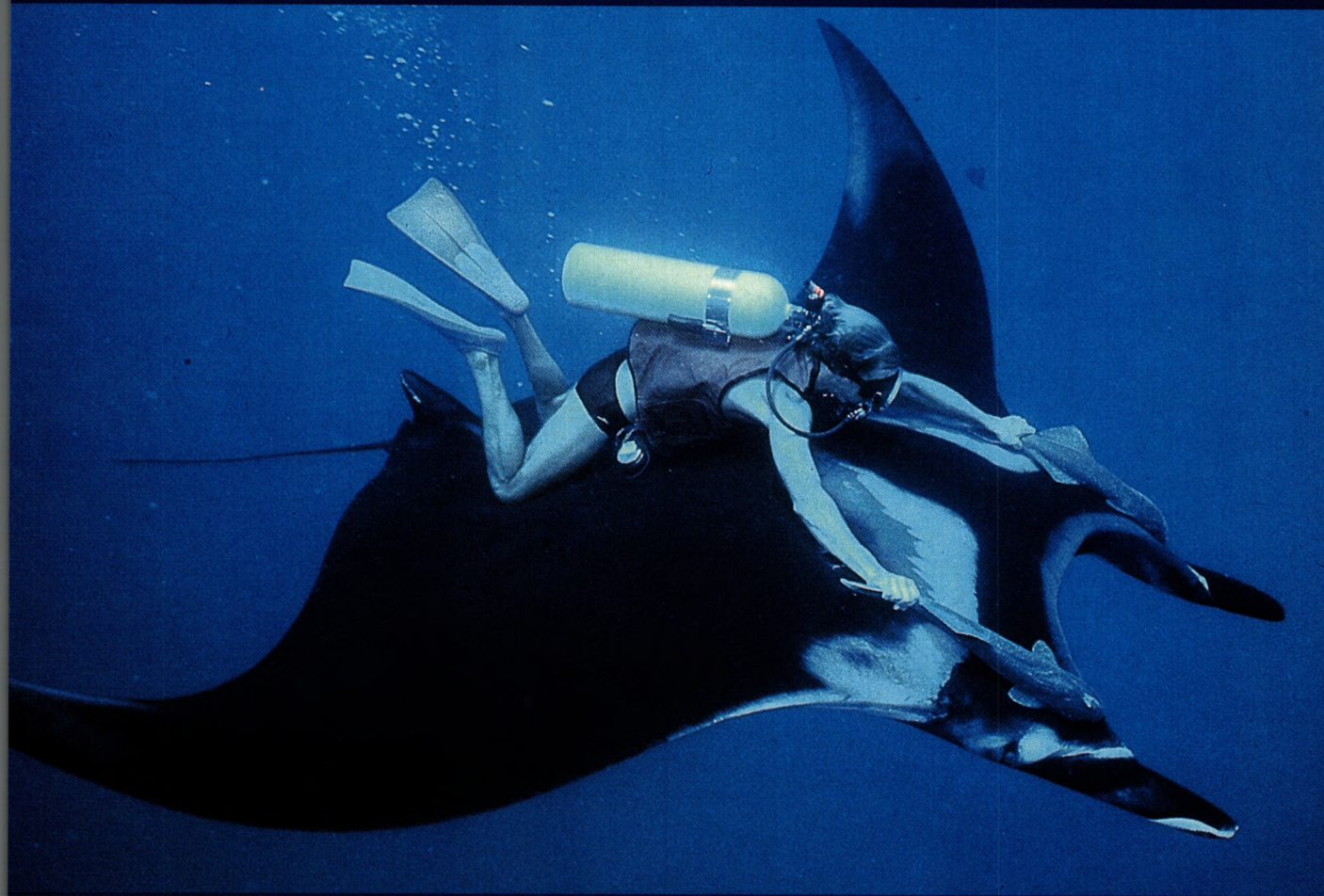
The hotel also offers many water-sport activities that include: windsurfing, Sunfish sailboats, trips aboard glassbottom boats, water skiing and jungle river boat trips. If you prefer to stay a little more land-locked, there are tennis courts, volleyball games, table tennis and a golf driving range.

Getting to Pyramid Island Resort is easy. TACA International Airlines has direct daily flights aboard the new Boeing 767 from Miami, Houston and New Orleans. The approximate two hour flight to Belize City from either of the three gateway cities is very pleasant. A complimentary first run in-flight movie and drinks at no extra charge are available to all passengers. After clearing customs at Belize International Airport, a small island commuter plane is waiting to take you to Caye Chapel. Caye Chapel has its own private 3,300 foot gravel runway. It is exciting to fly low over the shallow coral atolls and view the wizard-like colors of the barrier reef. If you prefer to come by boat, Caye Chapel has docks on the windward side in front of the hotel and in a protected 20 slip harbor with complete marine facilities on the leeward side of the island.

The fleet of dive vessels is impressive and includes the 50 foot boat, the *Offshore Express*, used mostly for overnight excursions to Glover's Reef, Lighthouse Reef or the Turneffe Islands. Equipped with full galley, head,

(Continued on Page 82)

Earn your wings in the Baja.



Imagine soaring over coral reefs, piloting a giant manta ray. In Loreto, that's just one way you can take diving adventure to new heights.

In Loreto, on Mexico's spectacular Baja coast, you'll share the waters with grey and finback whales, sea lions, dolphins and whale sharks. For the Sea of Cortez is one of the world's most unspoiled marine wilderness areas.

Loreto has something for every diver. Isolated coral coves. Pinnacle rocks and submarine peaks. Sheer walls that plunge to depths of over 100 feet.

Loreto offers complete diving services and facilities. Dive shops, rental equipment, airfills, PADI certification courses and dive tours with experienced guides.

Even on dry land, Loreto has plenty to offer. Like a range of fine hotels. A world-class tennis center. And Spanish missions to explore.

In Mexico, they say everything's bigger in the Baja. When you dive in Loreto, you'll know what they mean.

© 1987 FONATUR, Mexico Tourism. Another resort from Fonatur, the planners and developers of Cancun, Ixtapa and Los Cabos.



LORETO

WHERE EVEN THE
MOUNTAINS SWIM.

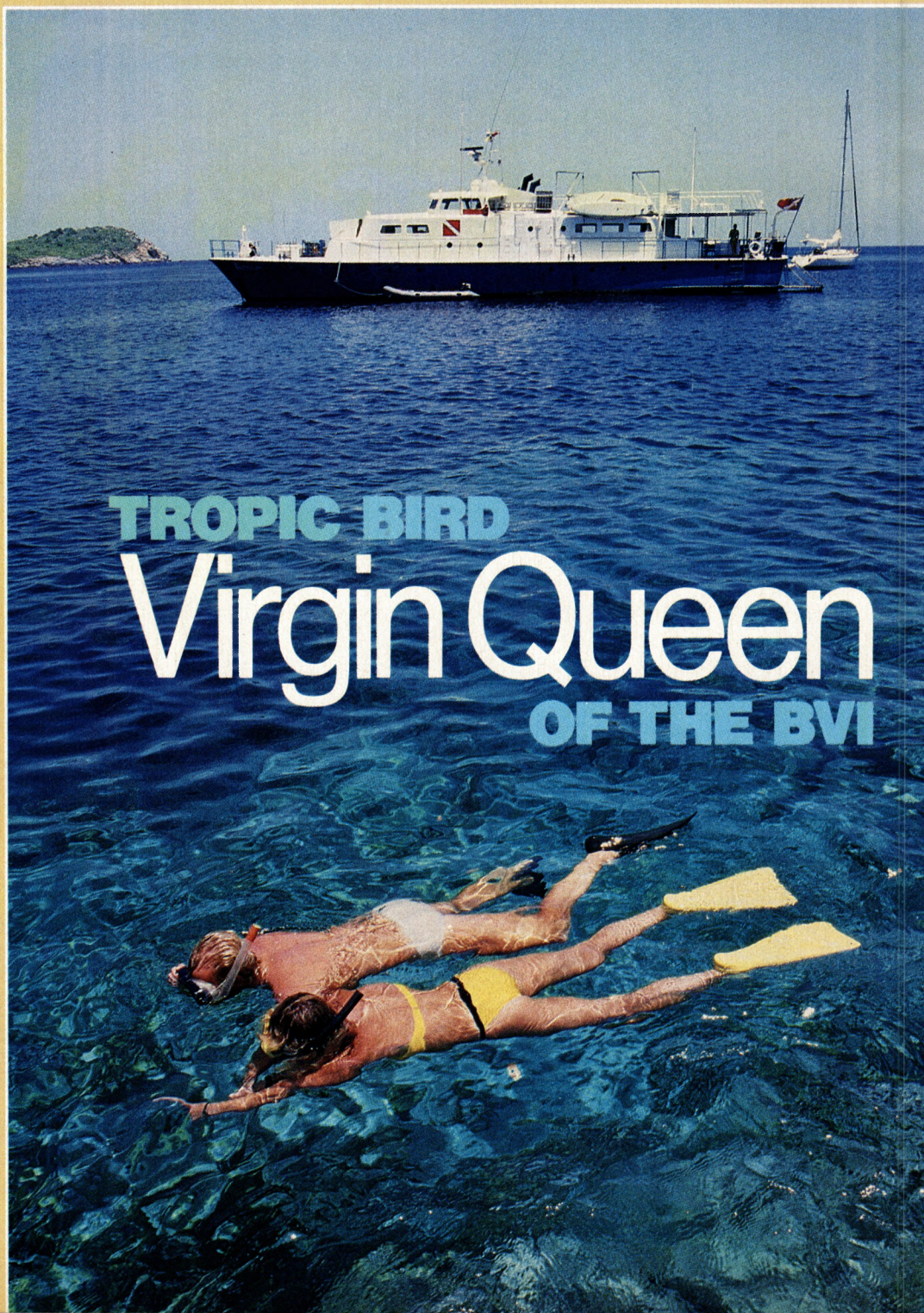
FANTASIA DIVERS

Special diving packages available. For more information call toll-free 1-800-336-DIVE (in Texas call (713) 558-9524)

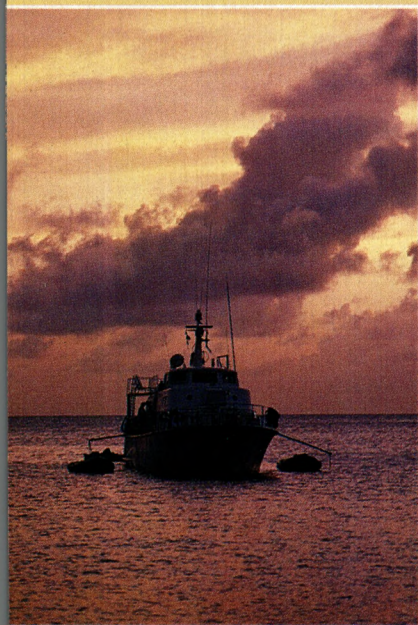
circle # 136 on Reader Service Card



With a wide stern platform and other conveniences, the *Tropic Bird* motors through the more than 50 islands and cays of the BVI, allowing its guests to make as many as 25-30 dives in a week. Guests can also dive at a more relaxed pace, taking in the fantastic topside scenery.



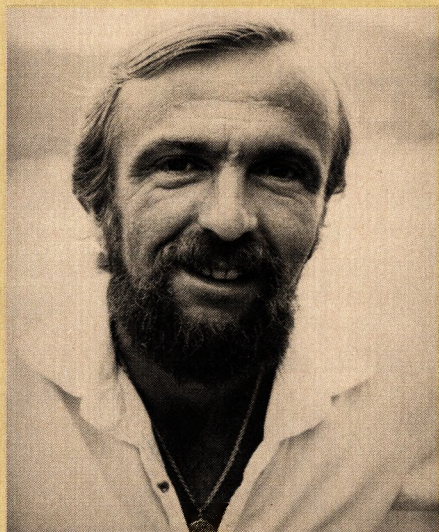
TROPIC BIRD Virgin Queen OF THE BVI



TEXT AND PHOTOGRAPHY BY GREG JOHNSTON

As a young boy I remember the fascination I had with tales of pirates Long John Silver and the infamous Blackbeard. I used to spend my Saturday afternoons in front of the TV set watching matinees featuring such swashbucklers as Errol Flynn and Douglas Fairbanks, Jr. I had always dreamed of exploring the very same islands and ports-of-call the pirates visited.

Today, I guess you could consider my wandering Caribbean travels an extension of my boyhood dreams. I still try to



Captain Mike Bloss

watch those old movies, but the best way I have found to relive those early days is to cruise the Sir Francis Drake Passage in the British Virgin Islands.

And, one of the best ways to do this is aboard the *Tropic Bird*. Affectionately called "the Bird" by her good captain and crew, this vessel is not a square rigged tall ship, but rather a modern live-aboard dive boat with a colorful history. The *Tropic Bird* is actually a WW II German E-boat, similar to U.S. PT boats. The E-boats were used extensively in North Sea combat. The *Tropic Bird* never saw action: The keel was laid during the later war years but the boat wasn't completed until 1969. It was used as a pleasure craft by a German investor. After several years of enjoyable cruising, the vessel was sold to a group of Bahamas treasure hunters, who used it to search for Spanish gold.

After Captain Mike Bloss and his partner, Phil Clarkson, purchased the boat in 1980, it was totally refitted as a modern live-aboard dive vessel and re-christened the *Tropic Bird*. The name is quite fitting, since its namesake is native to tropical waters. The tropic bird, as well as the vessel *Tropic Bird*, spends most of its time at sea and can be found regularly around tiny isolated islands.

The *Tropic Bird* is a streamlined motor vessel offering the well traveled diver maximum bottom time and maximum creature comfort. One hundred ten feet long, the fully air-conditioned blue and white *Bird* has 24 berths in 12 cabins. The vessel is capable of carrying 24 passengers and a crew of seven, but it rarely leaves port with that many. Sixteen passengers is more of the norm.

The aft saloon is fully carpeted and has a library, a color TV and VCR, and a large selection of first run movies and travelogues. A large, well stocked wet bar is in the forward saloon and the galley is below decks. Freshwater showers are never a problem. The *Tropic Bird* carries 3,600 gallons, more than a full boat could use in a week. There is a large topside sundeck. The large platform and two inflatable dinghies make diving convenient.

Booking passage on the *Tropic Bird* is quite easy, and half the fun of traveling to the BVIs. Eastern Airlines has daily direct flights leaving Miami to both San Juan, Puerto Rico and St. Thomas in the U.S. Virgin Islands. From there, you board an Air BVI plane for a breathtaking view of the mountainous emerald islands. The plane lands on Beef Island, adjacent to Tortola. A taxi takes you to Port Purcell in Roadtown and from there you're only minutes from the *Tropic Bird*.

Typically, the *Bird* motors through most of the more than 50 islands and cays of the BVIs. The protected cruising channel alternately known as Sir Francis Drake Passage, or the "Pond," is a 45 mile stretch of incredible beauty. Verdant mountain peaks rise from a shallow sea like outstretched fingers touching the pink toned clouds. Sunrises are as spectacular as the evening sunset; you can't help but sit back and wonder why you would ever want to leave this paradise.

Leaving the dock on a Saturday afternoon, the *Tropic Bird* stops at more than 20 different dive locations during the week-long excursion before returning the following Friday evening. It is not uncommon for divers to log more than 25 or 30 dives in the week. As one passenger put it, "We dive, eat, dive, eat, dive, dive, eat, then dive again!" After two days, the group I was with had me worn out. These divers were enthusiastic, but fortunately were also interested in doing a little beachcombing and willing to skip a night dive for an impromptu party. The rest of the week I elected to dive more leisurely and forego a dive or two to join the sun worshippers for an afternoon cocktail.

Each morning the day begins with a pre-breakfast dive. Between dives three excellent meals are served with plenty of snacking in-between. Some of the incredible sites we visited included Black Forest, near Norman Island. This site has a series of undercuts and ledges in the 30 to 80 foot depth range and is loaded

with black coral trees. The Indians is another interesting site. The underwater landscape is fascinating for the many caves filled with coppersweepers and glassy minnows. A large concentration of fish life can be found here as well as large clusters of pillar coral.

The following day may bring you to Cooper Island and a site known as Vanishing Rock. Here, the rock formation that rises from 40 feet to awash at low tide is an explosion of colorful marine creatures and sponge encrusted coral ledges. Later on in the week brings sites such as Ring Dove Rock, a mini-seamount rising from 60 to about 15 feet of water. Others include the Chimneys at Great Dog Island, the Grottoes at Mountain Point, and the phenomenal Baths of Virgin Gorda.

The Baths was one of my favorite sites. Looking much like giant marbles tossed onto the shore by some displeased child, the smooth round stones are a natural geological phenomenon. Named by the early explorers because of their resemblance to the Roman Baths, the waters are warm and shallow and the little creatures of the reef will entertain you for hours. A beach exploration of the many natural corridors and water filled rooms still fascinates me. The Baths is a favorite anchorage for sailors and yachtsmen.

Toward the end of our week on board the *Tropic Bird*, Captain Dan Morrison anchored near one of the best dive sites in the islands. Driven against the rocks by a violent hurricane in 1867, the wreck of the RMS *Rhone* is a premier dive today. The 310 foot Royal Mail Steamer is broken in two with the bow mostly intact at 80 feet. The mid and stern sections are scattered along the sloping wall in from 65 to about 15 feet of water. The bow section lies on its starboard side and is still penetrable, while the stern displays a massive propeller. The wreck is encrusted with corals and electric colored sponges. Soft corals abound. The *Rhone* is a photographer's delight, with every section a different setting for your buddy.

The *Tropic Bird* cruise is one of the most enjoyable ways to spend a relaxed diving vacation. In fact, Captains Dan Morrison and Mike Bloss guarantee easy diving year-round. If not, a full refund of the boat package price is returned to you. Although the *Bird* is now into its eighth year of service, Captain Bloss has never had to provide a refund. There are many leeward sides to the islands and only a hurricane could dampen your spirits.

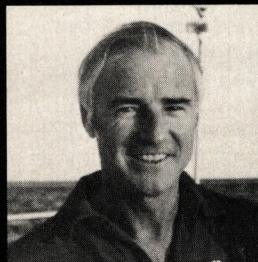
The British Virgin Islands are a destination for divers and dreamers, and it is nice to know the M/V *Tropic Bird* is there waiting for you. For further information and reservations, contact Scuba Tours, Inc., 5 Paterson Ave., P.O. Box G, Little Falls, NJ 07424; (800) 526-1394. In New Jersey call (201) 256-9115. Good luck! 🍀

WORLD-CLASS DIVING ADVENTURES!



Isla Mia
BELIZE

Unlimited superb diving and comfort on untouched, remote reefs!



Carl Roessler, President
See & Sea Travel Service, Inc.

Author
Coral Kingdoms
The Undersea Predators
The Underwater Wilderness
Mastering Underwater Photography
Diver's Guide to the Cayman Islands



Sun Tamarin
PALAU

Some of the world's greatest reefs aboard 60' motor/sailer. 3 A/C double cabins.



Cayman Aggressors II & III
CAYMAN ISLANDS

These great cruisers set a new standard for Cayman diving. Beyond compare!

CHINA TOURING AND DIVING

Eighteen-day adventures in Southern China with six dive days off Hainan Island. This is your chance to dive where practically no one has gone before. All for only \$3,400.00 per person (double occupancy) plus airfare.



Belize Aggressor
BELIZE

Belize's greatest diving adventure in superb Aggressor comfort.

Australia's Coral Sea + Baja + Belize + Caymans + Fiji + Galapagos + Great White Shark + Palau + Papua New Guinea
Philippines + Red Sea + Solomons + Sudan + Thailand + Truk Lagoon + Turks & Caicos

Nikon's Underwater Photography Techniques Seminars

Featuring Famed photographers *Carl Roessler, Paul Humann, Stephen Frink, Howard Hall, Marty Snyderman* and others.

Belize	Belize Aggressor	OCT 10-17	\$ 1095
Caymans	Cayman Aggressor III	NOV 14-21	1095
Coral Sea	Coralita	DEC 11-22	2450
Caymans	Cayman Aggressor III	DEC 12-19	1095
Belize	Isla Mia	JAN 16-23	995
Caymans	Cayman Aggressor II	FEB 20-27	1095
Belize	Belize Aggressor	MAR 26-APR 2	1095
Caymans	Cayman Aggressor III	APR 23-30	1095
Philippines	Tristar	MAY 17-29	1900

Contact us by Computer! (813) 332-0617



See & Sea

TRAVEL SERVICE, INC.

50 FRANCISCO ST./STE. 205

SAN FRANCISCO, CA 94133

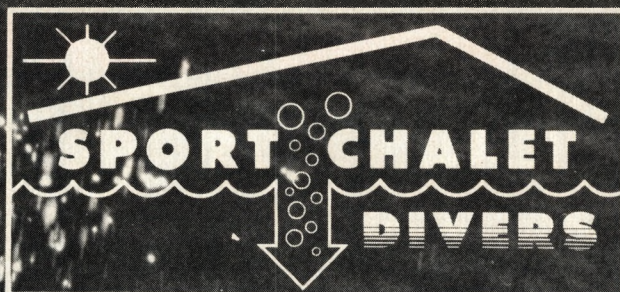
TELEPHONE (415) 434-3400

TELEX 278036 SEAS UR

FAX (415) 434-3409

SPONSORED BY Nikon Call the Dive Experts at 1-800-DIV-XPRT

SPLASH DOWN



**Southern California's
Largest Chain Of
Professional Diving
Retailers Announces The
Grand Opening Of It's
6th Location**

**POINT LOMA
OPENS
OCTOBER 31!**

LA CANADA
920 Foothill Blvd.
(818) 790-9800

HUNTINGTON BEACH
16242 Beach Blvd.
(714) 848-0988

MISSION VIEJO
27551 Puerta Real
(714) 582-3363

ESCONDIDO
Vineyard Shopping Center
(619) 746-5958

LA MESA
Grossmont Center
(619) 463-9381

New Location

PT. LOMA
3601 Midway Dr.
236-9191

And still available for 1987 - FIJI Dec. 10 & COZUMEL Dec. 12

1988 dates for tropical travel	Feb. GRAND CAYMAN	Apr. WWII WRECKS FLORIDA <small>"Bottom Time II"</small>	June SOLOMON ISLANDS	July BAHAMAS <small>"Bottom Time II"</small>
Aug. FIJI	Sept. BELIZE LIVE- ABOARD	Oct. SEA of CORTEZ	Nov. SOLOMON ISLANDS	Dec. COZUMEL

Call today for reservations on our local & exotic diving vacations.

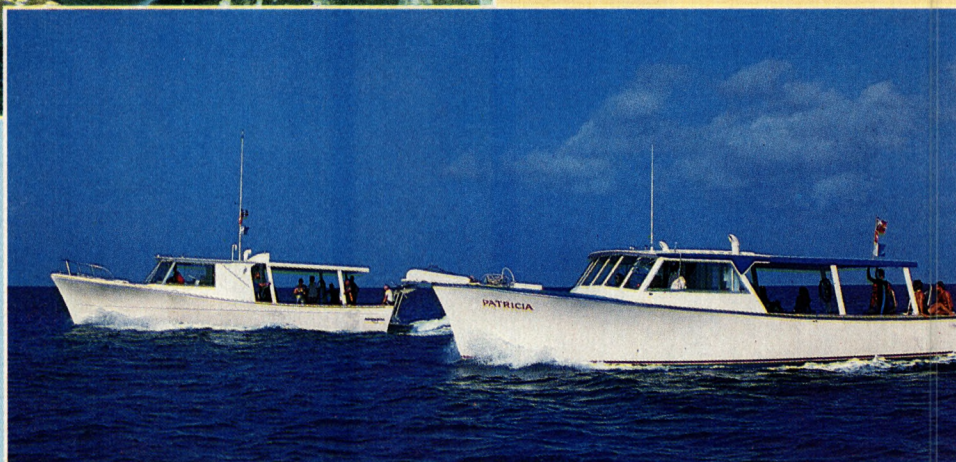
RIDING ROCK INN SPECTACULAR



There are 42 spectacular dive sites on the standard San Salvador Island itinerary, offering walls, caves, corals, large fish and turtles. Left: Maureen Morgenthien meets Nassau grouper. Below, left to right: Ed Gleason, Al Zamrok and Caroline Gannon.



The Riding Rock Inn offers easy, comfortable access to San Salvador Island dive sites aboard its fleet of dive boats. Accommodations are in 24 double rooms—all air conditioned and recently redecorated. There is a freshwater swimming pool, restaurant and lounge, and the diving facility dockside in the resort's private marina. Dedication to personalized service is a trademark of the Riding Rock Inn.



TEXT AND PHOTOGRAPHY BY STEPHEN FRINK

The integral perquisites of employment as a dive photojournalist are the special places one gets to visit. In 1976 I was living in Denver, reading SKIN DIVER and fantasizing about all the places in the Caribbean I would love to dive someday. In those days my recurring fantasy involved the Riding Rock Inn on San Salvador Island in the southern Bahamas.

San Sal was state-of-the-art for dive resorts in the late 1970s and early 1980s. Many of the innovations we expect of a quality Caribbean dive center today had their origin at the Riding Rock Inn. The hotel had targeted its marketing, reservations and airline connections to optimize the convenience of the dive traveler. Once on the island there were custom dive boats, a sophisticated dockside dive shop with guest gear storage and numerous diver convenience features such as E-6 film processing, a resident photo pro, a conference center, underwater photo classroom and a regular underwater photo school by noted photographers Paul Tzimoulis and Geri Murphy. Perhaps most important, the diving around San Salvador Island was spectacular. The resort was on the lee side of the island so the best conditions were consistent. The dive sites were very close to the resort, the underwater visibility was in the 100-150 foot range constantly, the vertical wall face started as shallow as 40 feet and the shallow reefs and wrecks were famous for the approachable marine life. There was even Sandy the dolphin, a wild animal that seemed to solicit and appreciate the company of divers. Never before and never since has a marine mammal so captured our affection and imagination with her voluntary U/W antics.

Times change and economic factors temporarily forced Riding Rock Inn from the dive travel marketplace. However, the beauty of the marine resources and the geographic advantages of the island as a diver's destination remained. For two years the resort lay dormant and divers mourned the end of a very special era. Now, gratefully, we need no longer wax nostalgic, for the Riding Rock Inn is with us again and diver services are better than ever.

San Salvador is 385 miles southeast of Fort Lauderdale, Florida in the southern Bahamas (not to be confused with San Salvador, the capital of El Salvador, in Central America). This translates to a two and one-half hour flight in a DC-3 or just more than an hour from a Nassau point of departure. The island is 12 miles long by five miles wide and the hotel is only one-quarter mile from the airport facility and Bahamas Port of Entry. The island itself is rather flat and arid, although there is ample tropical foliage and the resort is nicely landscaped. The relative absence

of rainfall reduces the possibility of freshwater runoff degrading the visibility and, as a result, the water clarity around San Salvador is as fine as that found anywhere in the Caribbean.

The resort is owned by San Sal native Carter Williams and features 24 double rooms, all air-conditioned and recently redecorated; a freshwater swimming pool; restaurant and lounge; and, of course, the dive facility dockside in Riding Rock's own private marina. Within the dive complex is a large classroom/conference center, darkroom with an E-6 processing machine, secure guest gear storage area, twin 15 cfm air compressors with more than 16,000 cubic feet of air storage, and dive boat dockage directly adjacent to the dive shop for maximum guest convenience.

The four new dive boats reflect the evo-

lutionary improvement the resort has experienced since its reopening March 1, 1986. Dive operations manager Al Zamrok searched long and hard to secure a fleet of dive boats to replace the tri-hull flattops of old. The new dive boats are all fiberglass V-hulls, significantly customized for diver convenience.

course, equipped with tank racks and all the rest. The newest addition to the fleet is a fast, 28 foot fiberglass open fisherman utilized for small groups of specialty divers or beach parties. Since no more than 16-18 divers are accommodated on the larger boats, and groups of a dozen or less on the smaller boats, the dive services at Riding Rock have a very personalized feel.

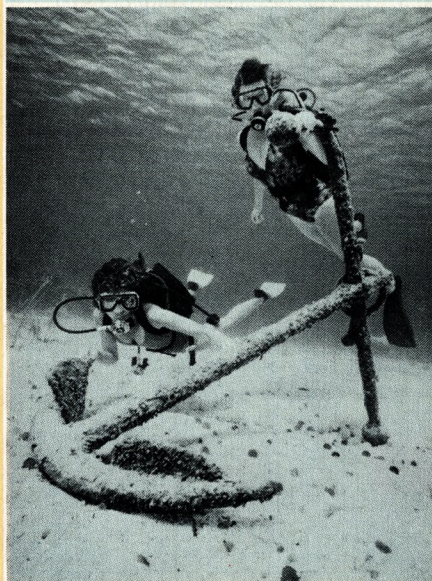
Guests do not carry tanks. Rather, the dive staff sets up the boat with the appropriate number of steel 3,000 psi cylinders at dockside. While there is a guest gear storage facility dockside, most divers elect to leave their equipment on the boats all week (without fear of theft). The captains remain on the boat at all times when guests are in the water to maximize safety and a qualified corps of divemasters handle the U/W considerations.

One of the most positive aspects of the small groups and dedication to personalized service is allowing divers to structure their own reef tour. This is not a "follow-the-leader" dive plan (unless a guided tour is requested) and dive computers are allowed for those who wish to plan multilevel assaults on the wall. The staff expects divers to keep track of their maximum depth, but the captain will log divers in and out and keep track of their repeat group designation. The dives are planned as no-decompression dives, but two second stages hang beneath the boat for the recommended three minute safety stop at ten feet.

Since the wall starts so very shallow, 40 feet in some areas, and the shallow reef begins in as little as 20 feet of water, three dives a day are the norm. The usual profile includes two dives in the morning, generally a wall and a shallow reef or wreck, followed by an afternoon wall dive. Two or three times a week night dives are scheduled and these may be done in place of the afternoon dive on the standard dive packages.

During our most recent visit to San Salvador, the personalized attention to detail began as soon as we made our initial telephone inquiry. The reservations staff in Ft. Lauderdale is all divers who have visited the resort many times, and reservations manager Maureen Morgenthien has been involved with the Riding Rock since its former incarnation. As a result, all questions were courteously and thoroughly answered, and since the stateside office is adjacent to the Ft. Lauderdale International Airport, staff members were available to check us in for our charter flight and on the return meet us at customs. Airline schedules permit a Saturday to Saturday itinerary from Ft. Lauderdale on the Riding Rock charter (either a DC-3 or nine passenger Beechcraft) or connecting through Nassau on a Tues-

Caroline Gannon and Barbara Doernbach examine the anchor at Snapshot Reef. This site offers an amazing amount and variety of marine life.



The *San Sally* is a 47 foot former lobster boat impressively powered by an 8-71 Detroit diesel, and the *Sea Fan* is a similarly powered 41 footer. Both vessels have walk-through transoms, oversized dive platforms with extended ladders, tank racks and freshwater camera rinses.

The *Island Time* is a 30 foot Island Hopper powered by twin diesels and, of

THE BONAIRE BEACH HOTEL



One of the world's greatest dive sites now makes your vacation even more exciting with **free** windsurfing, **free** sailing, **free** mini-golf, **free** day and night tennis, and our **free** games and activities program. All this, plus the largest white sandy beach on Bonaire, the Black Coral Casino and the new, certified Mistral Windsurfing School.

Our complete 7-night dive packages begin at \$318 and include unlimited shore diving.

For information and reservations call I.T.R.
800-223-9815. In N.Y. 212-840-6636.
Or Bonaire Tours at 800-526-2370.
In N.J. 201-566-8866.



circle #141 on Reader Service Card

FREE BAHAMAS BLACKBEARD CRUISE

One week paid vacation for the lucky winner of our drawing - excluding airfare to Miami - Here's How - One entry will be made by SCUBA CONNECTION, in your name for each \$100.00 purchase. Drawing will be held 9/30/1987.

SCUBA PACKAGE SPECIAL



- B.C. Jacket with power inflator, cummerbund and pack
- Durable, Easy Breathing Regulator with lifetime warranty
- Pressure-Depth Combo Gauge with max depth indicator
- For adjustable shoulders on B.C. Add \$40.00 (separate pricing available)

\$295⁰⁰ PACKAGE SPECIAL

Scuba Equipment should be used by certified persons only - This ad does not constitute an offer to sell via mail order



BLUEWATER
WETSUITS

1/4" Plush Farmer John
Fully edge trimmed

ONLY **\$179⁹⁵**

Join our group Bahamas trip Nov. 7-13, 1987

SCUBA CONNECTION

P.O. BOX 27061, CHICAGO, IL 60627

1-800-433-6077

FOR INFORMATION CALL 312-895-6262

circle #142 on Reader Service Card

RIDING ROCK INN

day or Saturday via Bahamasair. Some members of our tour elected to overnight in Ft. Lauderdale and special local hotel rates were available for them. Other people had connecting flights on the return and the Riding Rock staff arranged to transport them to the appropriate terminals. For anyone looking to minimize the hassle of international travel, the Riding Rock staff has it down to a science.

Once on the island we were whisked to the hotel, introduced to the friendly dive and hotel staff and were luxuriating at poolside with a piña colada within 30 minutes of arrival. Ours was a group of underwater photographers, so the dive center and the E-6 film processing facility was as much the center of activity as was the bar. Al Zamrok handled the daily film processing and divemasters Colin Tozer and Desi Stephens were especially helpful in finding the most interesting marine life for the group to photograph.

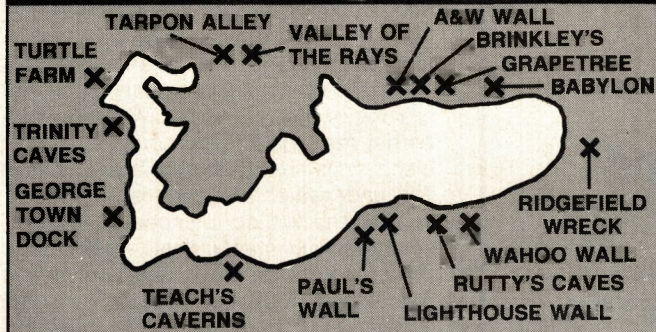
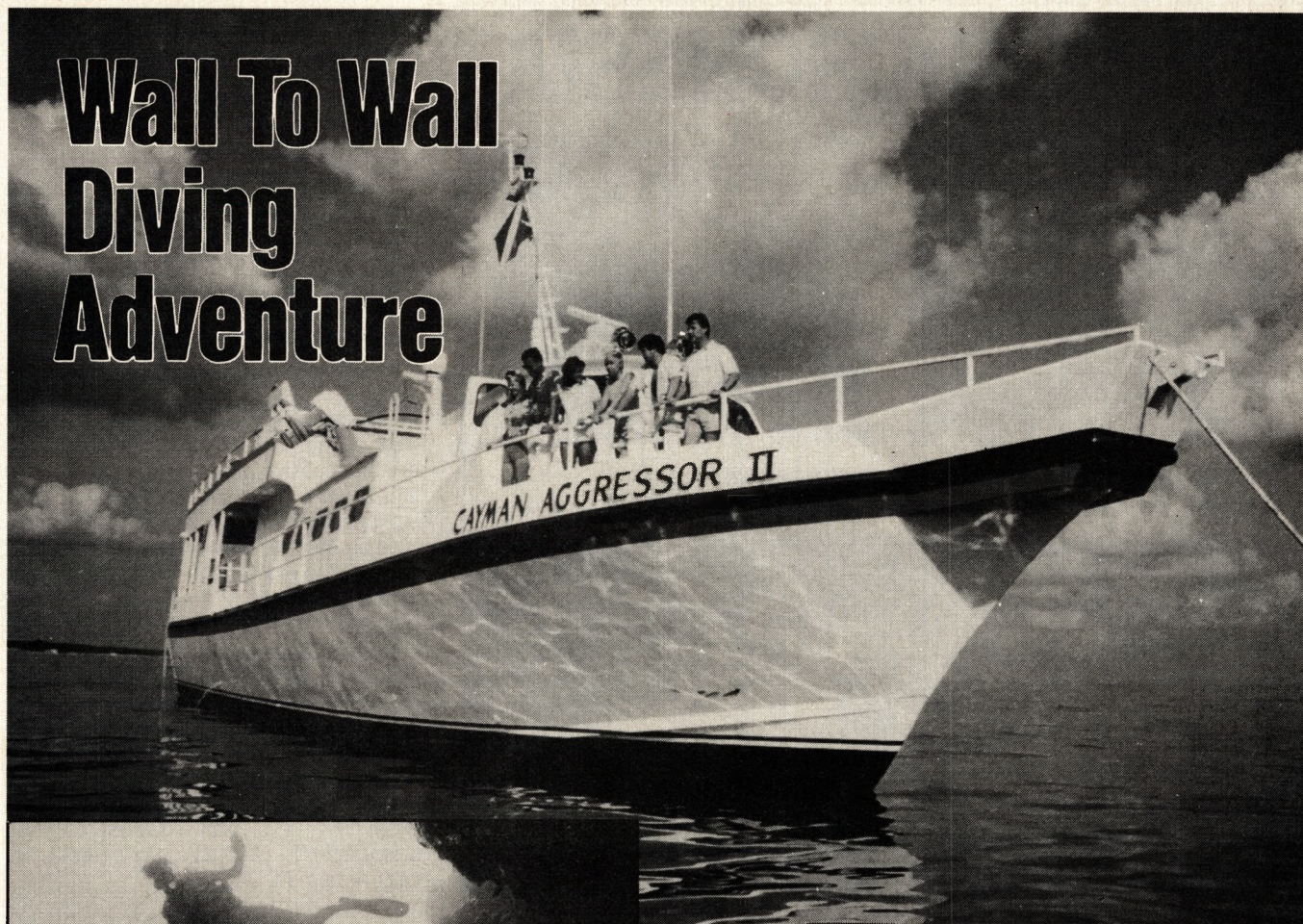
With more than 42 dive sites on the standard San Salvador itinerary, our group was able to visit 18 different sites during our week. Many of the best dives were along Fernandez Bay, on the west side of the island (the leeward shore) on which the resort is located.

Since the weather was cooperative, we were also able to dive French Bay on the south side of the island. This is the windward coast and is divisible most often during the summer or a nor'wester. There seems to be greater pelagic activity off French Bay and our dive to Double Caves presented twin swim-through caves along the inside of the reef. The caves start at 65 feet and exit along the wall at 100 feet. Red gorgonians and black coral adorn the tunnel interior and multi-hued encrusting and tube sponges provide color contrast. However, it was the blacktip shark, eagle rays and turtle encounters that remain my most vivid memory of French Bay.

The wall dives around San Salvador are among the best I've found in the Bahamas and I especially enjoyed a site known as Telephone Pole. The drop-off begins in only 40 feet, but a deep cut bisects the wall and exits at 90 feet. There were several Nassau groupers in the sand flats inside the wall that approached curiously, and one that followed us to 120 feet like a loyal dog, seemingly posing among the massive tube sponges. The divemasters, of course, feed the groupers, which accounts for their friendly demeanor, but the happy result is very cooperative and photogenic subject matter.

Snapshot Reef was the fertile submarine studio for scores of SKIN DIVER covers in the late 1970s. The brain and star coral heads; seafans; gorgonians; and rich fish populations—groupers, goatfish,

Wall To Wall Diving Adventure



- Tarpon Alley
- Brinkley's
- Grapetree
- Babylon
- A & W Wall

- Wahoo Wall
- Rutty's Caves
- Lighthouse
- Teach's Cave
- Trinity Caves

Grand Cayman is world renowned for its fabulous vertical coral walls. Few islands are blessed with so many, so magnificent, so protected.

CAYMAN AGGRESSORS make it possible for you to dive the most remote and very finest of these fantastic wall sites. Here is a random sample of the walls you might see in a 1-week trip aboard the AGGRESSORS:

The cruise itinerary is subject to change any time, depending on the weather conditions. However, the AGGRESSORS have 100 dive sites to choose from.

For more information, brochures, and reservations call:

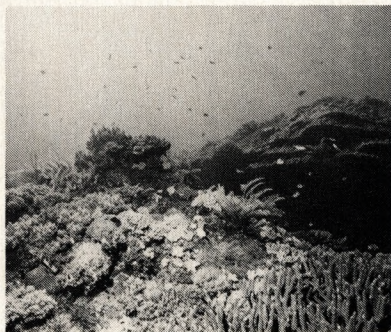
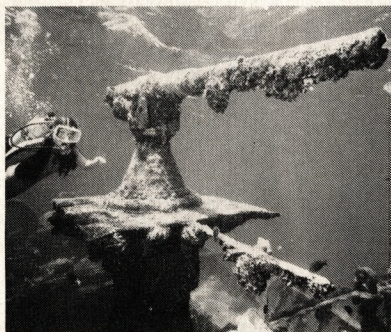
1-800-348-2628
(504-385-2092)

Aggressor Fleet, Ltd.
P.O. Drawer K
Morgan City, LA 70381
or

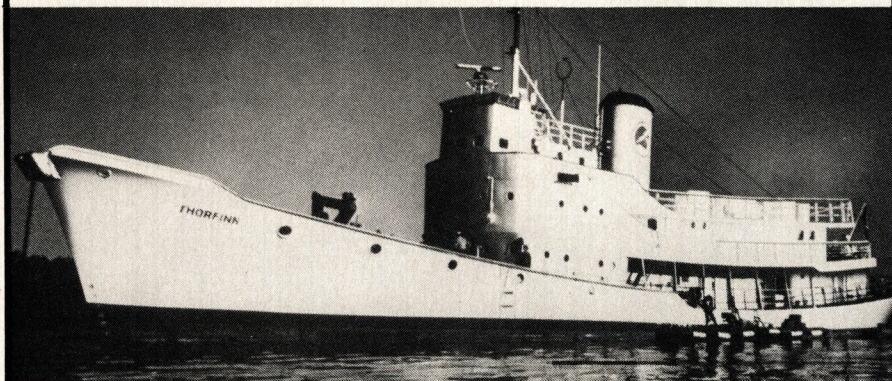
1-800-348-9778
(415-434-3400)

See & Sea Travel Service
50 Francisco St., Suite 205
San Francisco, CA 94133

TRUK/MICRONESIA



THE WRECKS . . . THE REEFS . . .



THE S/S THORFINN . . . NOW DIVING YEAR-ROUND!

Now you can dive the most exotic, legendary destination in the world.

With Comfort . . .

- 13 air-conditioned staterooms
- Plush lounge with VCR & A/V equip.
- Excellent meals & hors d'oeuvres
- Hot tub on deck!

With Safety . . .

- 170 feet of stable, spacious dive boat
- Largest dive boat in the Pacific
- Comprehensive electronics
- Certified for any waters of the world

With Economy . . . from \$1200 All Year-Round!

Experience unlimited diving from Thorfinn's 24' launches for less \$\$ than you dreamed possible.

\$1200 for 6 days; \$1680 for 8 days; \$2450 for 12 days

Call toll free: 1-800-663-8746 Or (604) 251-5925

SEAWARD HOLIDAYS

2315 Commissioner St., Vancouver, BC V5L 1A4

RIDING ROCK INN

squirrelfish, spotted drums, stingrays and friendly spotted moray eels—are still the stars of this beautiful patch of reef in only 20 feet of water. Night dives are especially productive at Snapshot with squid, octopus, spider crabs and lobsters predictably present.

Another memorable shallow dive is the wreck of the *Frascate* in only 18 feet of water. Here is the scattered wreckage of an old steel freighter run aground on New Year's Day, 1902. All that remains today are the massive boilers, motor, part of the stern hull section with rudder attached, ballast stones and some anchor chain leading to the bow section. Like most wrecks, the *Frascate* is rich in marine life, including a resident green moray eel that has been living on the wreck.

For divers who appreciate an intimate, dedicated dive resort with excellent diving consistently available, the Riding Rock Inn deserves serious consideration. For further information or reservations please contact the Riding Rock Inn toll free at (800) 272-1492 or, in Florida, (305) 761-1492. Mail inquiries may be addressed to 701 SW 48th Street, Ft. Lauderdale, FL 33315. 🐠

PYRAMID ISLAND

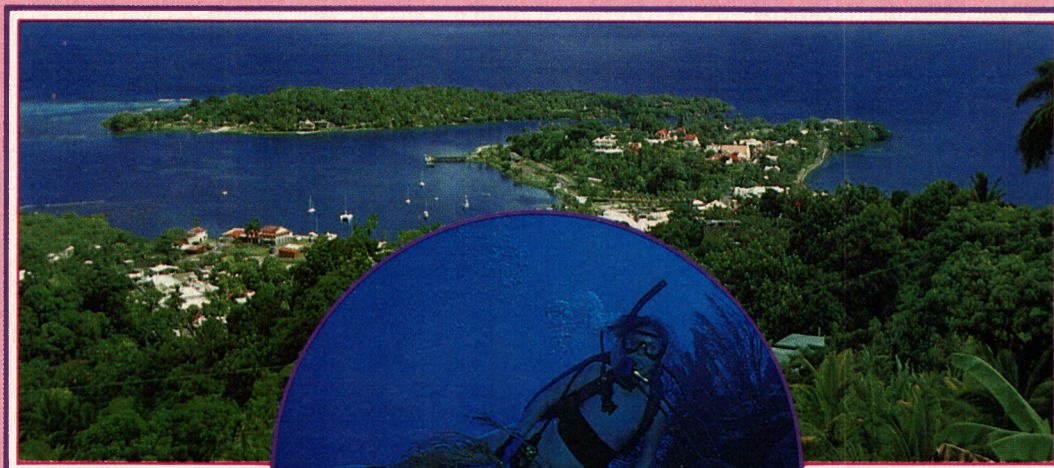
(Continued from Page 72)

compressor and 12 berths, it is a comfortable approach to exploring many of the reefs of Belize.

The fastest of the Caye Chapel fleet is the 37 foot Ensign sport boat used for both fishing and diving trips. It features a walk-through transom and flying bridge. Trips to the north end of the Turneffe Islands and along the barrier reef in front of the resort are easily accessible. For smaller groups, a 35 foot cigarette-type boat is used for day trips to the Blue Hole and Lighthouse Reef (50-60 miles per hour, weather permitting); as well as a 28 foot skiff, used for local island cruising.

Belize is truly one of the undiscovered regions of the Caribbean. With so much barrier reef and fringing coral atolls, new discoveries are at the drop of an anchor. The underwater seascape is so healthy, so raw and yet, so unexpected, that encounters with manta rays, whales, dolphins, sharks or eagle rays are almost guaranteed. And, the best part is, it's all at Pyramid Island Resort's front door. For more information on Caye Chapel and the Pyramid Island Resort, call toll free (800) 325-3401 or write P.O. Box 1545, Ashland, Kentucky 41105. Or if you prefer, contact the resort direct at P.O. Box 192, Belize City, Belize, C.A. or call direct 011-501-02-44409. Like they say in Belize, "Seeing is Belizing." Good luck! 🐠

JAMAICA



OUR BEAUTY RUNS DEEP

Our beauty runs from our lush green mountains, down refreshingly inviting waterfalls, to gorgeous beaches. But it doesn't stop there. Divers are invited to explore further... our seascapes have been described as "miniature versions of the Grand Canyon" with an unmatched variety of colorful sponges and tropical marine life.

SEAWORLD
RESORTS LIMITED

800-327-0010 • In Fla. 800-432-5034

CARIBLUE
BEACH RESORT

SEAWORLD
RESORTS LIMITED

800-822-4200

WYNDHAM
ROSE HALL BEACH HOTEL
& COUNTRY CLUB

SUNDIVERS
JAMAICA

809-973-2346 • 800-221-4588

Club
Caribbean

FANTASEA DIVERS



1-800-445-2690 • in N.Y. 212-953-7910

SEAPALMS



BLUE WHALE DIVERS LIMITED

800-633-0045 • In Mass. 617-497-7400

NEGRIL TREE
HOUSE CLUB

NEGRIL SCUBA CENTRE

809-957-4425

NEGRIL
BLACK CLUB
JAMAICA

800-526-2422

In Fla. 305-566-0447 809-957-4209



*The above are all members of the
Jamaica Association of Dive Operators*

Come experience the deeper side of Jamaica's beauty... a beauty only a diver can fully appreciate.

*For more information
and reservations contact:*
JAMAICA TOURIST BOARD
866 Second Avenue
New York, N.Y. 10017
800-223-5225
In New York: 212-688-7650

Holiday Inn Grand Cayman

"The Inn On The Beach" and Ron Kipp's

Bob Soto's Diving LTD.

Proudly announce the **Fifth Annual Guaranteed Dive Vacation**



AGAIN . . . NO SURPRISES AND NO EXCUSES. PLUS THESE NEW ADDITIONS!

The Hotel—Our International Beach Resort is located right on the beach in the heart and best part of beautiful 7 Mile Beach. Spacious, well appointed rooms, freshwater pool and beach bar. Excellent food and the home of the Cayman's best evening entertainment, the legendary Barefoot Man, the "Scuba Balladeer."

The Diving—Bob Soto's Ltd., the island's only PADI 5 Star diving facility, presents the most comfortable, spacious boats on Grand Cayman. Our drop-front boats pick you up right at the Holiday Inn beach—5-15 minutes to Cayman's best dive sites.

New Additions—Upgrade available for North Wall or Double Wall Dives at minimal additional charge. Underwater slide show every week. Maximum divers per boat 20 people. Room upgrade at additional cost, based on availability at time of arrival. Northwest Airlines—official airline for guaranteed dive package.

Dive Packages Includes—5 nite accommodations (economy category) at the Holiday Inn Grand Cayman—full American breakfast daily—four morning two tank dives—one night dive.

Package Also Includes—Unlimited shore diving • tanks/backpack/weight belt/surface buoy/for shore dives • Free Bob Soto's Diving T-shirt • Welcome Manager's Rum Punch Party • Free admission to the Wreck of the Ten Sails nightclub • All the amenities of the Holiday Inn Grand Cayman. Air fare is not included.

Price **\$399.00** per person
double occupancy

Effective April 21 through December 15, 1987

Three night package **\$219.00** per pers. dbl. occ. Seven night package **\$529.00** per pers. dbl. occ.

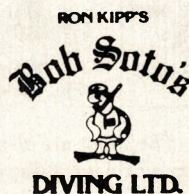
*Prices do not include 10% service charge and 6% government tax which will be quoted at the time of booking.

Your dive boat will operate every day—GUARANTEED
Your room reservations are confirmed every day—GUARANTEED
Or your diving vacation is free—GUARANTEED



See your Professional Travel Agent, Dive Shop or write U.S. Reservations Office, The Holiday Inn Grand Cayman, 5100 Poplar Avenue, Suite 2219, Memphis, Tennessee 38137.

1-800-421-9999



FUMITSUKI

(Continued from Page 29)

assigned to the Japanese 3rd Fleet as leader of its sub chaser group. The following January she participated in the rescue of Japanese troops from Guadalcanal. One year later, while engaged in operations at Rabaul, *Fumitsuki* came under attack by a U.S. Grumman F6F-3 fighter. The damage she sustained necessitated a return to the Combined Fleet's anchorage at Truk for repairs.

Fumitsuki was moored aside the repair ship *Akashi* when Truk was attacked on February 17. With the power of her one remaining engine, *Fumitsuki* attempted a zig-zag evasive pattern to avoid attack. At noon she was struck in the port engine room by a bomb, rendering her dead in the water. Though the bomb didn't explode, five men were killed and the ship's hull was cracked. The destroyer *Matsukaze* tried to take *Fumitsuki* in tow. The attempt was unsuccessful so to avert further attack, the hospital ship *Tenou Maru* was used to shield her. At 2:00 pm *Fumitsuki* deployed a double anchor to prevent her from drifting farther in the lagoon.

At 4:00 pm, the dead were wrapped and sealed in the engine room, where they remain to this day. The wounded were transferred to the target ship *Hakachi*, the rest of the crew remained aboard. When *Fumitsuki* began to list she signaled Dublon Island for assistance. A tug was sent to again try to take her in tow. After another unsuccessful attempt, the crew was transferred to safety on the nearby island of Udot.

At 2:00 am on the morning of February 18 a nearby merchant ship—the *Shinkoku Maru*—was sunk. United States pilots mistakenly reported the *Fumitsuki* aground. At 10:00 am that day she slipped beneath the waves to rest, undisturbed, for 43 years.

The lack of success in locating the wreck of the *Fumitsuki* was in part owing to the erroneous battle reports. Her captain, the late Yoshiharu Nagakura, disputed the pilots' claim and in interviews provided Tomoyuki Yoshimura a more accurate account of *Fumitsuki*'s fate. With new information regarding the locale of her anchorage and potential drift range, Yoshimura set out to find the wreck. It was still like looking for a needle, but in a smaller haystack. On April 25, 1987 after only a few days of renewed searching, the *Fumitsuki* was discovered in 125 feet of water, upright and intact.

The news of the wreck's discovery spread rapidly throughout Truk. The Japanese team brought back videotapes with images of little structural damage, many artifacts and much marine growth.

(Continued on Page 88)

DIVE THE BRAC & LITTLE CAYMAN

DIVE: With Winston McDermot
STAY: At the new Brac Reef Beach Resort
FLY: On Cayman Airways 727 Jet Service or their new 30 Passenger . . . **SHORTS 330**

To announce Cayman Airways new Brac service, Brac Reef Beach Resort has introduced super summer saver prices.

Divers all inclusive pkg:

- Round trip air fare on Cayman Airways from Miami or Tampa
- Airport transfers on Cayman Brac
- Welcome cocktail
- A/C oceanfront deluxe room
- Unlimited alcoholic beverages
- All meals included

- 2 tank a.m. boat dive each full day, or if weather permits, we will take you to dive Bloody Bay Wall at Little Cayman

- Unlimited air for shore diving
- We will provide transportation at 3 p.m. daily to a shore dive site
- All room taxes and gratuities
- 4 days, 3 nights per person dbl. occ. including all of the above

\$499

4 & 7 NT. PKGS. AVAIL.

U.S. 1-800-327-3835 • FL 1-800-233-8880

AX, MC, Visa accepted Effective dates: 4/3-7/3, 87; 8/31-11/30, 87; 11/30-12/18, 87

**BRAC REEF
BEACH RESORT**

Brac Reef Beach Resort
 USA Office, P.O. Box 72279,
 Tampa, FL 33602

Cayman Airways



circle #146 on Reader Service Card

The Place... **Philippines**

The Vessel: 120 ft. Lady of the Sea...best way to dive the Philippines!

The Diving: Some of the most exciting diving in the world around the reefs of the Sulu Sea - Tubbataha - Jesse Beazely Reefs, etc....See Undercurrents March '87...
 Scheduled trips from October thru June...



NEW! Special Priced Jan./Feb. '88 Mini-Cruises...from \$1750

Regular cruise departures begin March '88...from \$2595...includes air transportation from West Coast...
 For the economy minded ask about Bonito Island Resort in Batangas...

Call or write for information, departure dates and reservations.



Philippine Airlines

Poseidon Ventures Tours • 359 San Miguel Dr. • Newport Beach, CA 92660 • (714) 644-5344 or (800) 854-9334
 • Also: 505 N. Belt, Suite 675 • Houston, TX 77060 • (713) 820-DIVE

circle #147 on Reader Service Card

Technifacts

BY E.R. CROSS



We will never be able to complete the stories of our diving because we see so little of the U/W world. We skim only the shallow surface layers of the infinite depths of the seas, leaving no permanently marked trails. A few bubbles drifting toward the silvery sky that is the surface of the water temporarily mark our paths. Soon these will scatter and disappear forever.

How many times have you been asked a question such as, "What is it like underwater at Avalon, Catalina Island, off the California coast?" Or, "How deep is the wreck of the *Diamond Knott* in the Strait of Juan de Fuca?" Or, "How can I find the location of known wrecks in Manila Bay?" Divers are asked these enigmatic questions, and many similar puzzlers, almost daily. Their answers sometimes re-

mind me of the mystified, faltering beginnings of the marine sciences 2,000 years ago. It was then that the infant science of cartography (map making), was born. This lack of information on the part of most divers is not as it should be since the knowledge gained in the intervening two millennia has been compiled, edited and published and is readily available to all who are interested in knowing more about the marine world.

This Technifacts is designed to take the mystery out of finding what kind of underwater conditions exist at anytime, anywhere in the world. It can generally be done without leaving your home town.

THE SOURCES

If divers wanted to research conditions at every dive site in the world they would

need hundreds of publications, thousands of charts and maps and a lot of time. To zero in on what a dive would be like at one specific location will, on the other hand, involve one or two publications and from one to two or three charts or maps. The real secret of extracting information from these publications is to be able to accurately interpret the symbols, signs and marks used on them. As an example, the three most important publications used in planning a dive on the wreck of the *Diamond Knott* in the Strait of Juan de Fuca were navigation charts, tide tables and the *United States Coast Pilot, Volume 7, Pacific Coast, 1985* (21st edition). This volume includes the coasts of California, Oregon, Washington and the Hawaiian Islands.

(Continued on Page 136)

NICK'S aqua sports

LTD.

HYATT REGENCY  GRAND CAYMAN

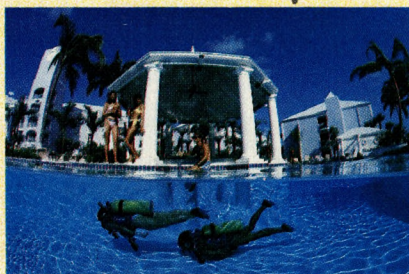
AT BRITANNIA, BRITISH WEST INDIES



Grand Cayman's most professional recreational facility for above and below surface excitement. Nick's operates daily scuba and snorkeling trips aboard the dive boats of the future... the REEF SPIRIT and the CORAL SPIRIT. Combine the luxury features of the world-class Hyatt Regency Grand Cayman with Nick's careful refinement of water sports for a truly personalized diving vacation.

New custom-designed twin-diesel dive boats • Low ratio of divers to divemasters • Full water sports including Mistral Windsurfing School • Large pool with swim-up

Catch the Spirit!



bar • Private Beach Club • Britannia PGA Golf Course • Spirit of Ppalu 65' catamaran - day, sunset, and dining cruises.

NICK'S aqua sports

LTD.

11601 Biscayne Blvd., Suite 200
Miami, Florida 33181
1-800-255-NICK • (305) 893-4500
on island 1-809-949-8745

A castle in the sand.



© 1987 Hyatt Corp.

Drift away to an island treasure in the Caribbean, and watch your troubles ebb with the tide on Seven Mile Beach.

Where an ocean of choices awaits diving enthusiasts. And a swim-up bar beckons those more reserved.

The Hyatt Regency Grand Cayman. Where far away isn't just a place. It's a state of mind.

HYATT REGENCY  GRAND CAYMAN
AT BRITANNIA, B.W.I.

One of the Faraway Places.SM

For reservations or more information on
Hyatt Resorts worldwide, call your Travel Planner or 1 800 228 9000.

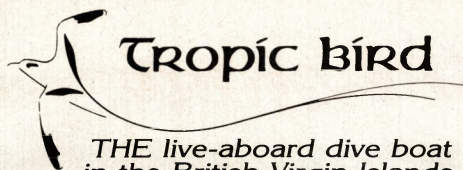
circle #149 on Reader Service Card

SKIN DIVER OCTOBER 1987 87

B.V.I.

You think this means
British Virgin Islands.
It also means great
diving year round. We
guarantee that you will dive day and night, have more food
than you can eat, and more fun than you can imagine.

It really means **Best Vacation Investment!**



Tropic Bird

*THE live-aboard dive boat
in the British Virgin Islands.*

*Board by 11/15/87 for cash back offer.



Photo Credit: M. Bouvier

Copyright © 1984 Cienfuegos

BEST DOLLAR VALUE

12 Double Staterooms
Fully Airconditioned
Unlimited Diving
Guaranteed Diving
Night Dives
TV Movies & Games
Sun Deck & Bar

oooooooooooooooooooooooooooooooo

Call Toll Free

800/526-1394

In NJ 201/256-9115

circle #150 on Reader Service Card



MIAMI #1
Pro Dive Shop



AQUANAUTS DIVE SHOP

677 S.W. First Street
Miami, Florida 33130

Open 6 days 9 a.m. to 6 p.m. Closed Sunday

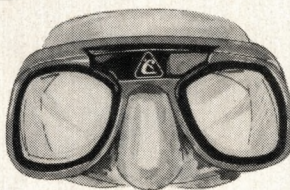
Tel. (305) 545-9000

Aquanauts Catalog \$4.00

Aluminum Tank 80

K-Valve

Price **\$109⁰⁰**



Optical Mask Silicone

Price **\$110.00**



BONAIRE BOUND??

Don't Miss the November
Issue Dive Guide

skin diver

EL PLACER DEL CARIBE



DIVE AT CHINCHORROS REEF
Personal service at the new Caribbean resort.

1-800-237-7552 (Nat'l.)

1-601-875-4807 (MS)

circle #255 on Reader Service Card



Wet your whistle but don't drown it.

Don't drink too much of a good thing.
The Distilled Spirits Council of the United States.
1300 Pennsylvania Building, Washington, D.C. 20004

FUMITSUKI

(Continued from Page 84)

After negotiating a release we became the first American dive team to see the wreck of the *Fumitsuki* two days later.

Our travel arrangements to Truk were made through Art Travers at Poseidon Ventures Tours. The 10½ hour flight from Honolulu to the main island of Moen was aboard a Continental/Air Micronesia 727.

We stayed at Truk's largest hotel, the two-story Truk Continental. Each of its 56 air-conditioned rooms has a scenic view of the lagoon. Manager Ed Benavente plans to expand the hotel's recreational activities to include tennis, a swimming pool and other watersports.

We planned our diving activities with Kimiwo Aisek and his son, Gradvin, of Blue Lagoon Dive Shop. Kimiwo was 17 when Truk was attacked and he saw the battle from atop Dublin Island. His knowledge and firsthand experience are constantly sought out by wreck divers, researchers and history buffs. With Tomoyuki Yoshimura and two of his team

FUMITSUKI

Mutsuki Class.....	One of 12
Designation	DD 30
Length.....	360'6"
Beam	30'
Draft	9'10"
Displacement.....	1,315 tons
Maximum speed	34 knots
Commissioned.....	Feb. 16, 1926
Armament.....	4, 4.7" anti-aircraft guns
	2, 1.4" anti-aircraft guns

members, our morning charter left the loading dock of the Continental Hotel for an area 30 minutes due west of Moen Island. Blue Lagoon had predispatched a boat and crew to relocate the wreck and anchor. When we arrived, they were still trying to anchor, a hard task, as the 30 foot wide ship lies parallel to the current and presents a small target. After many attempts, the anchor was hooked amidships.

Visibility in the 83°F water was 60 feet and hampered by suspended particulate matter. At 40 feet, we could see the ship 50 feet below. We entered the bridge through the port hatch. The structure inside is undamaged and all of its workings are present. Some are recognizable, such as the Japanese characters on the porcelain face of the ship's telegraph. Others are disguised by 43 years of submersion. The area is confined and the silt is easily disturbed.

Outside the bridge, on the starboard side, is a large lantern flanked by a brilliant red tomato anemone. Atop the bridge are the ship's binoculars, mounted and so overgrown that only the two front lens ports are distinguishable. Be-

cause of a 30 degree list to port, the ship's superstructure deteriorated and collapsed under its own weight. At the base of the front of the bridge, the Japanese team placed a cluster of pressed flowers and a scroll, offerings from surviving shipmates in homage to their entombed comrades.

Two anchorlines run from the windlass over the side and disappear into the blue. The 4.7 inch bow gun faces forward. One ammo box is open, its 12 shells seemingly ready to load. The torpedo launcher on the foredeck sits atop a swivel mount that allowed 180 degrees of rotation. A small gauge track runs aft along the starboard deck to a hatch astern the superstructure. An adjacent winch reveals it was used to transport heavy weapons in a cradle to their launch.

Continuing aft, we examined a number of anti-aircraft emplacements. Although the gun barrels are missing, their shields



Continental Airlines flies nonstop from Los Angeles, California to Honolulu.



Air Micronesia completes the second leg of the trip, flying from Honolulu to Truk.

are intact and heavily overgrown. Aft of the stern gun a dark, indiscriminate structure rises. A closer inspection revealed it to be a huge growth of Robin Hood coral.

We dropped over the stern to the bottom to inspect the ship's propellers. At one time, combined with the ship's twin turbine engines, they were able to generate 38 knots of speed. Today, they lie still. The port screw is buried past its shaft, revealing only its top blade. The starboard prop is off the bottom and encrusted with sponges, seaweeds and rock oysters. Returning to the deck to begin our ascent and decompression, we passed a huge crack on the rear quarter of *Fumitsuki's* hull. It is the wound that slowly sent her to her grave.

With the discovery of the destroyer comes the solution to one of Truk's unsolved mysteries.

For more information about diving Truk contact Art Travers at Poseidon Ventures Tours, 359 San Miguel Drive, Newport Beach, CA 92660; (800) 854-9334 or (714) 644-5344. You can also contact the Texas office: 505 N. Belt, Suite 675, Houston, Texas 77060; (713) 820-DIVE.

Cayman Condo Connection

Hard talk about Cayman dive travel prices
Now buy Cayman dive packages direct from the source.
No middleman. Compare money saving prices.

VICTORIA HOUSE

\$444

8 days/7 nites
p/p dbl.

- Elegant economy on the 7 mile beach • 6 AM dives • 1 nite dive • Unlimited shore diving • 5 nites \$333 p/p dbl.

LONDON HOUSE

\$555

8 days/7 nites
p/p dbl.

- 6 AM dives • Unlimited shore diving • 1 nite dive • 5 nites \$388 p/p dbl. • 3 nites \$232 p/p dbl.

PLANTATION VILLAGE

\$399

8 days/7 nites
Quad p/p

- 7 Mile Beach near Georgetown • Exclusively appointed Villas-2 pools-tennis-TV-spa-patio • 6 AM dives • 1 nite dive • Unlimited shore diving • Quad p/p • \$499 p/p dbl.

TARQUINN MANOR

\$422

8 days/7 nites
Quad p/p

- 2 B/R very private 7 Mile Beach condo-pool-game room-BBQ • 6 AM dives • 1 nite dive • Unlimited shore dives • 5 nights \$239 p/p • 3 nights \$199 p/p • Nissan 5 pax car per week \$40 p/p

PAN CAYMAN HOUSE

\$222

4 days/3 nites
Quad p/p

- With Auto, 10 Beachfront Units, Large L/R-bar-sundeck-patio • 7 nites, \$499 p/p • 6 AM dives • 1 nite dive • Unlimited shore diving • 5 nites \$399 p/p • Includes standard size car

DIVING BY BOB SOTO'S DIVING LTD.

- Beach Pick-up
- Large Boats—Small numbers
- Unlimited Shore Diving At SCUBA CENTER
- Direct North Wall and East End Wall Trips
- Group Specials
- PADI 5-Star Facility

Cayman Condo Connection

1-800-262-7686
In FL 305-981-7555 Box 1801-T Grand Cayman, B.W.I.



The American Express® Card warmly welcomed at Bob Soto's Diving Ltd.
Does not include tax & gratuity payable upon arrival

Mushimasmigili (pronounced Mushi-mas-migili), New Hanover, Maumere and Russell are not the latest rock groups, fashion designers or sport cars. They are actually the names of God's gardens. I am convinced the Garden of Eden is to be found underwater.

Where is this paradise? Put your finger on the equator of any globe and move it to where the Indian and Pacific Oceans meet. Move your finger in either direction from that central point; to the west you'll come to the Maldives and Indonesia; to the east, Papua New Guinea and the Solomon Islands. Biologists call this area "the center of all species of U/W life."

It took two months of intensive exploration, 160 hours of bottom time, and 275 rolls of film to convince this Israeli—who had spent 15 years diving the Red Sea—that he had found God's underwater garden elsewhere. As president of La Mer Diving Seafari, I led two separate groups of American divers, first to Papua New Guinea for a Nikon underwater photo course and three weeks later to the Maldives. Afterward I explored on my own.

In the tradition of La Mer's first class live-aboard style, in Papua New Guinea we were guests of Bob and Dinah Halstead, on their 65 foot *Telita*. The *Telita* joins the 65 foot *Little Cayman Diver* in the contemporary generation of new live-aboard boats—specifically designed from keel to sundeck, and platform to cabins with the diver/photographer in mind. With five air-conditioned double cabins and a state-of-the-art air fill station, the *Telita* ensures the comfort and unlimited diving for which La Mer is known.

The *Telita* moves to a different location around the extensive Papua New Guinea coastline approximately every three months, according to best diving conditions. During our inaugural trip in December 1986, we visited Milne Bay in the southeast corner of the island. Here, in addition to seeing superb pristine reefs and an abundance of tropical fish, we had a remarkable encounter with four killer whales. Imagine the thrill of sitting on the edge of a dinghy running at 30 knots, snorkeling gear on, cameras ready, following these magnificent creatures. At a signal, the engine stops and we all backroll into the water. Underwater, hearts race as a graceful 15 foot mother and her seven foot calf pass within 10 feet of us. Another one comes within five feet, sizing us up with her big round eyes, allowing us an indescribable encounter. It's one of those special moments you never forget!

In March, we explored the waters off New Hanover, on the northeastern part of Papua New Guinea. Inspired by Bob's report of diving with seven eagle rays on his previous trip to Eagle Ray Pass, we all were anxious to dive there. This 500 yard reef acts as a natural barrier to a channel. During high and low tide, tremendous amounts of nutrients bounce off the reef and attract pelagics such as barracudas, jacks, kingfish and tunas. Here, at close range, we saw four different species of sharks, eight small manta rays and finally, in the cut of the reef, 13 eagle rays in a perfect vertical column. Adults four feet in breadth were positioned above and below us, with smaller two foot rays in between. Holding their position against the current, they seemed to be suspended in midwater.

On a quest to experience the fascinating culture of Papua New Guinea, we spent a week on land, trekking along a tributary of the Sepik River to Karawari Village and Ambua in the highlands. There we witnessed the rich tradition and colorful local ceremonies such as the "Sing Sing" and purchased a few pieces of authentic art.

It is easy to reach the Maldives. It is only a four hour direct flight from sophisticated Singapore. Arriving in Male, we immediately boarded the 72 foot motorsailer *Rusulka*, equipped with four double cabins and accompanied by two tenders. In preparation for what would be the climax of our trip, we spent the first three days at Male Atoll, to acclimate ourselves to this splendid ocean. Water temperatures average 86-90°F. There are tremendous walls with dramatic drop-offs, 200 foot visibility and

a profusion of surprisingly tame and rare marine life we had never seen before. On the fourth day we sailed to Ari atoll about 40 miles due southwest, to Mushimasmigili, which means fish head. Mushimasmigili is a giant, oval reef formation, approximately 500 yards in diameter. It rises from a depth of 130-200 feet to within 30 feet of the surface. The eastern end is a sheer drop-off; the western wall is jagged with caves, cuts and overhangs. The top of the reef is covered with hard coral and a few sandy patches, forming an ideal habitat for tropical fish. We spotted mating octopus; clown triggers; Moorish idols; blue, scribbled, banded and yellowface angelfish; reticulated, vagabond and dusky butterflies; shimmering glassy sweepers; and five different species of lionfish. However, Mushimasmigili will probably become known as a gathering place for pelagics and predators. Since the reef is in the middle of nowhere and there is always a one-half to three knot current it is like a five star hotel for marine life. There are always 15-20 sharks around: six to eight foot blacktips, silvertips, bulls and tigers. Occasionally, a curious hammerhead or basking shark checks in. An eagle ray family of eight constantly patrols Mushimasmigili. We found them to be amazingly friendly, allowing us to be eyeball-to-eyeball with them. These encounters took place while we were continually surrounded by hundreds of barracudas, shiny batfish, cruising jacks and dogtooth tunas. On the western wall, overhangs at 40 and 60 feet were literally obscured by several hundred yellow and blue-striped Spanish grunts. The exquisite scenery of Mushimasmigili warranted our staying there for two and one-half days for 12 dives. Along with Ras Muhammad in the Red Sea, El Bajo in the Sea of Cortez, Negril Pass in Palau and Marion Reef in Australia, Mushimasmigili is one of the world's greatest dive sites. And, having been to them all, I think it is the best.

Saturated with extraordinary underwater images, I bid farewell to this group and continue on my own to Indonesia to meet my host, Andre Pribaldi, pioneer of diving in Indonesia. We flew southwest of Jakarta to Maumere on Flores Island and continued on to Andre's favorite dive site, Rays Lagoon. On the bottom of the lagoon, we saw seven six foot southern stingrays and a dozen whitetip sharks. Four silvertips cruised the mouth of the lagoon. Fish of every color and species bounced up and down the wall. It looked like a fish disco! Basket sponges larger

Exotic Trips

TO DISTANT SEAS

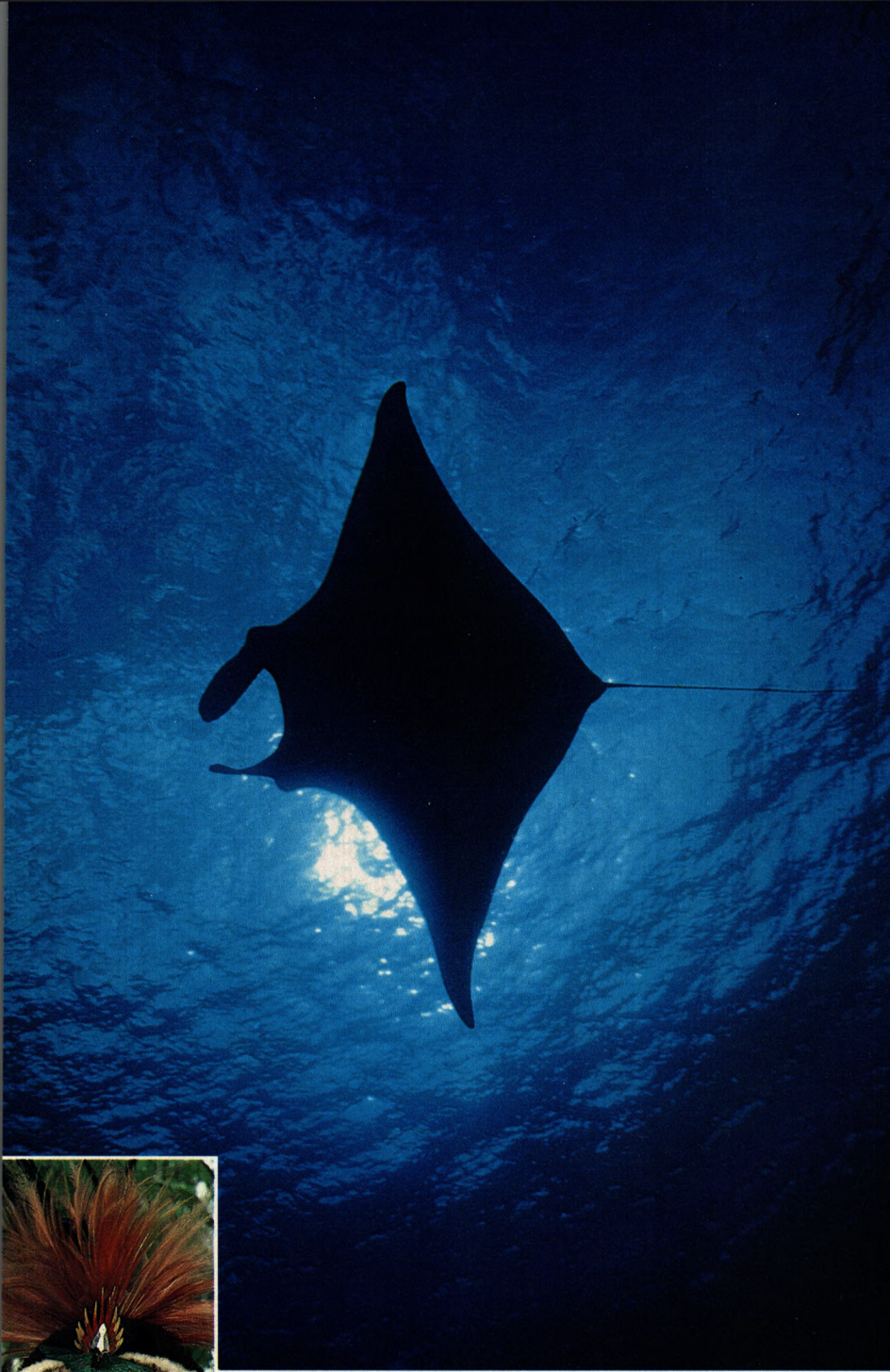
PROBING NEW FRONTIERS

TEXT AND PHOTOGRAPHY BY AMOS NACHOUM

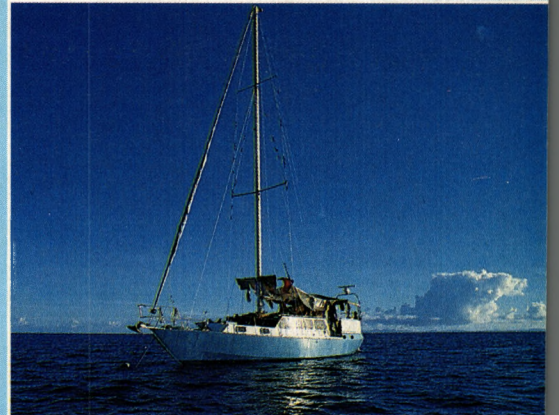
than myself, soft corals and gorgonians decorated the wall in many colors.

Back aboard the boat, as we were preparing to leave for another dive site, a splashing sound interrupted our conversation. What a spectacular sight to see a great manta ray leaping from the water! In no time we were back in the water with hearts dancing as the graceful giant manta ray, 20 feet from wing tip to wing tip, performed a solo for us.

Each of the many reefs we visited thereafter was as magnifi-



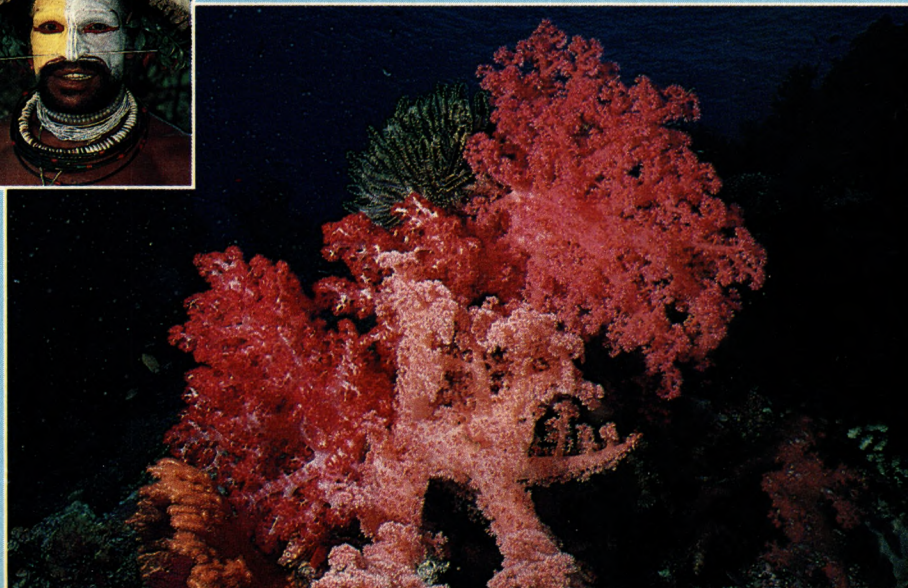
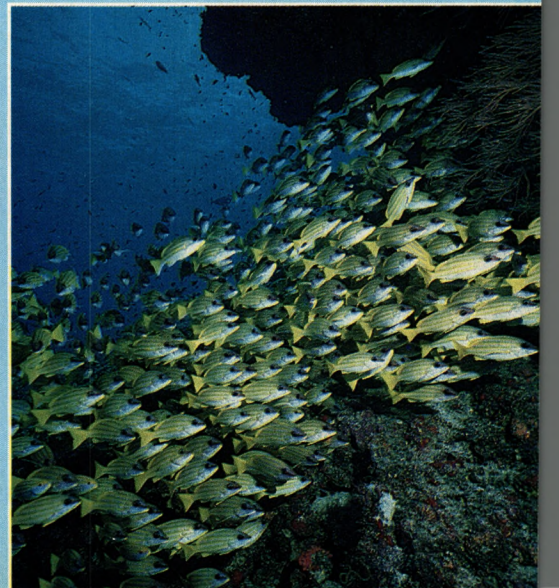
Telita, Papua New Guinea.

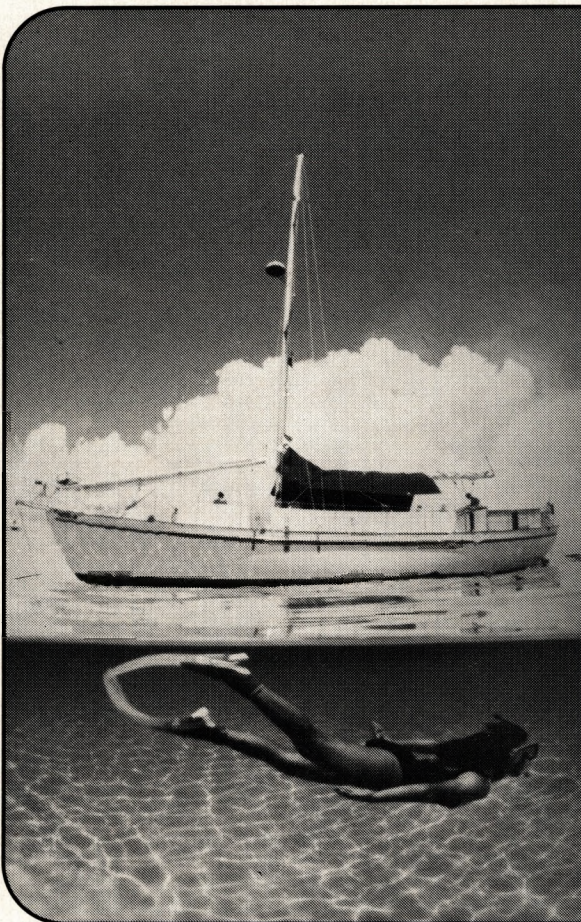


Wyuna, Solomons.



Rusulka, Maldives.





Blackbeard's

Sail/Dive Cruising In The Bahamas

"The Best of Both Worlds Above and Below"

- 3 dives a day • beach parties
- island exploration • out-island nightlife
- shell collecting • sailing • fishing
- lobster hunts • lazy days • virgin diving

Nobody Has More Fun —

Blackbeard's Cruises

P.O. Box 66-1091, Miami Springs, FL 33266

Toll Free (800) 327-9600 • Florida

Florida (305) 888-1226

circle #152 on Reader Service Card

COZUMEL

TOURS INCLUDE

- TRANSPORTATION TO AND FROM AIRPORT.
 - 3 NIGHTS STAY WITH 2 DAYS DIVING WITH 2 TANKS OF AIR DAILY.
 - 7 NIGHTS STAY WITH 6 DAYS DIVING WITH 2 TANKS OF AIR DAILY.
 - 15% TAX ON LAND SERVICES.
 - DIVES INCLUDE: Back packs, weights, weight belt, lunch, soft drinks & unlimited beach diving.
- NOTE: Rates are per person based on double occupancy and are land only, valid only with the purchase of a Continental Airlines Ticket from American Leisure.

 \$199 3 NIGHTS • 2 DIVES \$449 7 NIGHTS • 6 DIVES	 \$99 3 NIGHTS • 2 DIVES \$289 7 NIGHTS • 6 DIVES	 \$162 3 NIGHTS • 2 DIVES \$374 7 NIGHTS • 6 DIVES	 \$184 3 NIGHTS • 2 DIVES \$424 7 NIGHTS • 6 DIVES	 \$199 3 NIGHTS • 2 DIVES \$449 7 NIGHTS • 6 DIVES
 \$135 3 NIGHTS • 2 DIVES \$343 7 NIGHTS • 6 DIVES	 \$183 3 NIGHTS • 2 DIVES \$415 7 NIGHTS • 6 DIVES	 \$233 3 NIGHTS • 2 DIVES \$517 7 NIGHTS • 6 DIVES		

Caribbean Divers

American Leisure

Ask your travel agent or dive shop to call American Leisure at
 National WATS 1-800-231-5804 or 1-800-777-1980
 Texas WATS 1-800-392-2380

CONTINENTAL

Rates Valid Through 12-15

circle #153 on Reader Service Card

EXOTIC TRIPS

cent as the previous one, all lavishly decorated by mother nature and blessed by warm, rich water. Given the warm hospitality of the Indonesian people, and the splendid gift of more than 14,000 pristine islands, I am convinced that Indonesia will soon be added to the "must dive" list of every diver/photographer.

The final leg of my journey was to another slice of heaven, the Solomon Islands. If the name doesn't ring a bell, perhaps Guadalcanal will. This legendary WW II battlefield is now a serene haven for divers in search of new adventures. Here I had the rare opportunity to dive untouched wrecks as well as some of the most intriguing reefs in the South Pacific. Attesting to the grandeur of the Solomons was the fact that in only two months, David Doubilet, Stan Waterman and I all elected to visit Brian Baily and his wife Marie Clair. We all explored the underwater beauty of this area from the Baily's 54 foot motorsailer, *Wyuna*. Built by Brian specifically for charter, the *Wyuna* is all steel and accommodates six guests in three double cabins. It has two compressors and a good dive platform. I asked Brian what he considers the best dive site. Then I watched in amusement as his eyes moved from upper right to left, scanning his mental library. He concluded that there are three "best." The wreck of the *John Penn*, off Guadalcanal, Crook's Bommies and The Custom Cave, both in the Russell group. Crook's Bommies reminded me of the Red Sea and Coral Sea combined with a profusion of marine life and magnificent flora endemic to the South Pacific. The Custom Cave is a dramatic geological formation. Entering through a cut in the shore that is 6 feet wide, 20 feet long and 50 feet deep, we follow a horizontal tunnel—30 feet wide, 10 feet high and 200 feet long—that leads to an underwater ballroom that is 80 feet wide and 100 feet deep. After coming through the dark tunnel, we were startled by laser-like beams of sunlight penetrating through a 4 by 15 foot slit in the ceiling. They illuminate the dark ballroom water like a chandelier. Looking up toward the opening, we were astounded to see reflections of the clouds and trees above. It is a most awesome and magnificent sight, impossible for mere words to describe and a challenge for wide angle U/W photographers.

A golden thread emanates from "the center of all species," weaving through the Maldives, Indonesia, Papua New Guinea and the Solomons. These destinations have no advertising budget and consequently, few tourists. All are exotic but easily accessible (about 12-17 flight hours from the United States via Qantas and Singapore Airlines, in conjunction

(Continued on Page 105)



Sunset, it's the perfect start to the evening.

You can spend it relaxing in our popular outdoor bar, or, if you like, gear up for a spectacular night dive into the water right off the hotel property.

It's up to you.

Whether you're a novice or pro-diver, at Sunset House we've got all you need for a fun dive vacation.

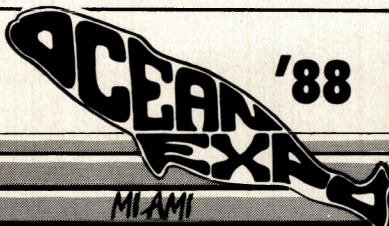
We're divers ourselves so we can make sure you get the most out of your stay with us.

Make your reservation on 1-800-854-4767 or write PO Box 479, Grand Cayman, BWI.

SUNSET HOUSE

Grand Cayman's Hotel For Divers By Divers.

circle #154 on Reader Service Card



'88

OCEAN EXPO

MIAMI

FEBRUARY 19 - 21

DIVE & OCEAN SHOW

Over 200 Booths!

FILM FESTIVAL • LECTURES & MORE

PHOTO CONTEST DISPLAYED

For info/entry form:

Ocean Expo '88, 1141 NE 142 St., N. Miami
Florida 33161 (305) 891-6095/891-6581

COZUMEL'S BEST



**NEPTUNO DIVERS
& BEACH CLUB**

HOTEL MESON SAN MIGUEL

CONTINENTAL

**8 DAYS/
7 NIGHTS**

\$26220

Sept. 1-Dec. 15
p.p. dbl. occ.

- 5 2-tank dives, 1 night dive
- Room, welcome drink
- Lunch on day dives, 15% Mexican Tax
- Weights, untd. free tank use
- Free entrance to Neptuno Disco and 10% discount at our famed Acuario Restaurant

For Reservations or Brochure Call:
1-800-282-4198, then 4440 or 1-800-468-6224
In FL: 813-371-3196 In TX: 713-468-6211

circle #155 on Reader Service Card



SURFSIDE EXPLORER

**ST. MAARTEN, ST. EUSTATIUS
AND SABA BY LAND AND SEA**

TEXT AND PHOTOGRAPHY BY BILL GLEASON



Divers have benefitted from the oil glut in two ways: First, it's a lot easier on your wallet when you pull into a gas station. Second—and a little less obvious—there is a new fleet of large, powerful live-aboard dive boats.

When the oil glut hit, many offshore exploration and pumping operations shut down. This left the boats that served these rigs without work. Diving entrepreneurs have snapped these up, converted them for comfortable living and hassle free diving and put them into service in California, the Bahamas, Cayman, Belize, Turks and Caicos and now, the eastern Caribbean.

The *Surfside Explorer* is the newest live-aboard and it's state-of-the-art. All 100 feet of this gleaming cruiser are testimony to the new generation of live-aboard dive boats. It has powerful diesels, a custom designed dive deck and living and playing quarters that leave plenty of space for each of its limit of 16 passengers. Yet its uniqueness lies in the concept and execution of its itinerary.

As to concept, about 12 months ago SKIN DIVER conducted a survey asking for reactions to live-aboard boat diving. While many said only "dive, dive, dive!" a large percentage also responded that they preferred the freedom to explore vacation islands at their own pace. Based on this report, Surfside Watersports of Scranton, Pennsylvania, Grand Cayman and St. Eustatius—already beginning the process of acquiring and converting the *Explorer*—designed a special itinerary. It includes unlimited diving in a virgin area of the Caribbean with visits and tours to three lovely and quite distinct islands of the Dutch Netherlands Antilles: St. Maarten, St. Eustatius and Saba.

What an opportunity: Unlimited diving on three or more islands—sometimes St. Bart, St. Kitts or Nevis may be added—all just a few hours apart! While you're resting, or at night, the inflatable is always there to take you into town for sightseeing and, for those passengers who prefer, dinner. No worry about customs or bureaucratic red tape. That is taken care of by the captain and crew on arrival. You're free to dive and explore.

This odyssey begins and ends in St. Maarten, which is served by American Airlines (even West Coast divers can make the trip in one day), Eastern Airlines and a sprinkling of other carriers. Frequent flights make it easy to get in and out of St. Maarten. You join the boat at Bobby's Marina in Philips-

The signatures of Saba diving are dramatic walls and exciting pinnacles. Marine life is extensive and varied. The waters off the island are a marine park, complete with moorings.

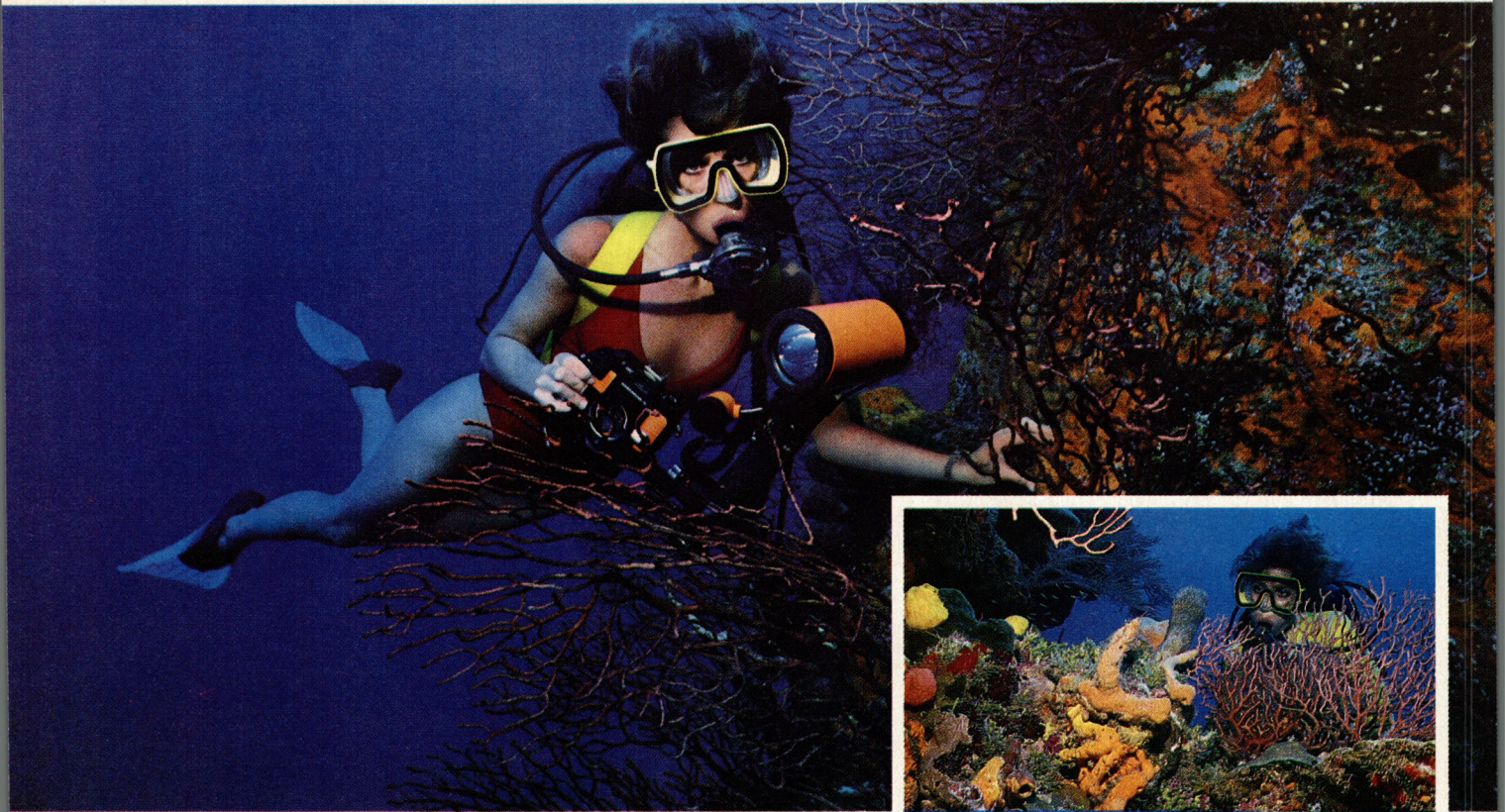


The 100 foot *Surfside Explorer* is a state-of-the-art live-aboard. It delivers the best of land and sea, visiting the islands of St. Maarten, St. Eustatius and Saba in the eastern Caribbean. St. Eustatius (Statia) diving includes encounters with flying gurnards, historical wrecks and colorful reef life.



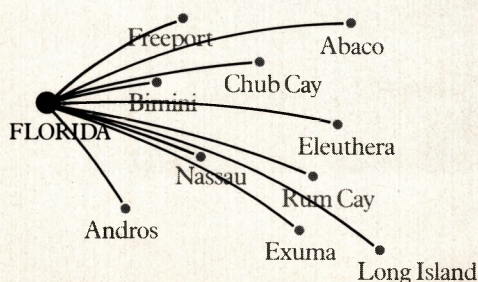
The Bahamas.

When you get down to it, no other place gives you as many diving experiences.



Historic wrecks. Drift-diving along the Continental Shelf. Magnificent marine life. Visibility up to 200 feet. The challenge of blue hole diving. Spectacular drop-offs. Brilliant coral reefs and canyons. Discovering countless "critters." 100,000 square miles of uncrowded ocean. A different place to dive every day.

Just off the Florida coast.
It's all there in The Bahamas.



For sports information, call 800-32-SPORT toll free. For hotel reservations, see your Travel Agent or call 800-327-0787. In Dade County, 443-3821.

It's Better In The Bahamas.

circle #211 on Reader Service Card

SURFSIDE EXPLORER

burg, a short 15 minute ride from the airport. Stow your gear and you're finished with travel considerations for the week!

St. Maarten has dual citizenship, with a French and a Dutch side. This is the place for great freeport shopping and world-class restaurants. Since your first night is spent in port, try the happy hour at the Greenhouse, within a three minute walk from the boat. It's the best on the island. A little later, try Sam's Place for drinks and music. It's a great way to forget about jets, bags and the minor inconveniences of international travel. If you're inclined, there are also casinos just five minutes away on Front Street.

Early Sunday finds you at your first dive site, either off St. Maarten or Saba. Before or after breakfast (this is unlimited diving, after all) make your warmup dive and get the divemasters' orientation to diving from the *Surfside Explorer*. Lynn Laymon and Linda Walden are both NAUI instructors who will describe each dive site in detail as well as leading dives for anyone who wishes.

Three hours later, Saba rises out of the Caribbean depths. High cliffs and mountainous terrain mark this as one of the most beautiful islands in the world. With a population of around 1,000 people, spread out in four little villages with names such as The Bottom (actually 700 feet above sea level), it is fascinating and unique. Some years ago, a Dutch engineer told the locals that building roads was theoretically impossible on Saba. So a Saban took a correspondence course in road building. The resulting road is an engineering marvel, its S-turns and steep inclines providing spectacular views at all times. Add quaint little cottages, friendly people and try the local liqueur called Saban Spice. Starting to get the picture that all the fun and travel adventure on the *Surfside Explorer* doesn't happen at sea?

Thanks to the Netherlands Antilles government and the industrious efforts of marine biologist Tom van't Hof, the waters off the island of Saba are a marine park, complete with moorings and charted dive sites. The diving is spectacular.

1. Tent Reef Wall: A very dramatic, classic Caribbean wall beginning in 45 feet of water. Severely undercut, it has occasional sandfalls.

2. Tent Reef Shallow: This is one of the prettiest shallow dives in the Caribbean. There's plenty of bottom time (it's no deeper than 50 feet) so bring plenty of film. It's an unsurpassed night dive!

3. Pinnacles are perhaps the most unique of Saba's many diving attractions. These seamounts rise from the depths to 90-100 feet. They have names such as Third Encounter and Shark Shoal. The

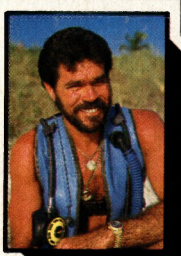

(Continued on Page 110)

BAHAMAS

Dive South Ocean

N A S S A U

AT THE DIVI BAHAMAS BEACH RESORT & COUNTRY CLUB

DIVE THE "TONGUE OF THE OCEAN"

... dive operation just 45 minutes from Miami, and only 2½ hours from New York. We are pleased to announce the opening of the newest Peter Hughes dive operation November 1 at Divi Bahamas Beach Resort & Country Club in Nassau. Peter Hughes Dive South Ocean will take you quickly and smoothly to more than 30 Gulf Stream-nourished dive sites surrounding New Providence Island, while providing the same standards of excellence - safe, dependable, hassle-free diving - divers throughout the Caribbean have come to expect from Peter Hughes.

The most famous underwater motion picture and television location in the world, New Providence holds within its crystal clear waters dramatic walls and drop-offs leading to the mile-deep "tongue of the ocean," as well as finely structured shallow reefs filled with schools of hundreds of varieties of multi-colored marine life.


The 120-room Divi Bahamas Beach Resort & Country Club offers everything the diver/snorkeler and the non-diver could look for in a vacation destination... a spectacular beach, beautiful freshwater pool, great restaurants, four lighted tennis courts and a superb 18-hole golf course.

- COMPLETE PETER HUGHES INSTRUCTION AND CERTIFICATION COURSES •
- MANY EXCITING DIVE/SPORT/VACATION PACKAGES AVAILABLE •

CALL 800-367-3484

Full cooperation with travel agents and dive professionals.

DIVI HOTELS MARKETING INC., 54 GUNDERMAN RD., ITHACA, N.Y. 14850, 607-277-3484



The \$699 Cozumel Vacation.

It's less money and more fun than any other one.

The more-for-your-money, everything's-paid-for resort on Cozumel Island includes:

- ◆ All you can eat ◆ All you can drink
- ◆ All our water sports, even scuba diving*
- ◆ All the comforts of a Jr. Suite
- ◆ All the fun under our sun—and stars
- ◆ Round-trip air from Houston and more, in the 7 night/8 day price.

CONTINENTAL

The only airline worth flying.™

* (certified divers)

3 night/4 day Packages also
FEATURED AT YOUR TRAVEL AGENT



BARBACHANO
Tours Since 1923

U.S.A. Except Florida 1-800-327-2254 • Florida Only 1-800-231-1127

circle #158 on Reader Service Card



EXPERIENCE



DON FOSTER'S Dive
Grand Cayman Ltd.

"Don Foster's name is to diving what Harvard's name is to universities," Paul Tzimoulis states in Skin Diver Magazine.

Stay with us at the Royal Palms of Cayman, located directly on Seven Mile Beach. Special diving vacation packages are available beginning at \$195 pp/dbl occupancy for 4 days and 3 night, including accommodations and diving activities. Available April 21-Dec. 15, 1987.

Contact Scuba Tours, 1-800-526-1394, or (201) 256-9115 in New Jersey.

Tax and gratuity not included.

circle #159 on Reader Service Card

IN
MEMORIAM

**PETER
GIMBEL**

BY JACK MCKENNEY

Peter Gimbel was a dignified man with a lot of verve and style. On July 12, 1987, he died of cancer at his home in New York. He was 59.

I wish I were a poet so I could eloquently describe my feelings with the dignity and style befitting the man. Since I'm not a man of letters, I'll have to convey my thoughts as a close friend and fellow worker, someone who stood beside him on a few of his projects; both of us getting dirt under our fingernails and growing a little moss between our toes.

I met Gimbel when I was brought in as a cinematographer on his first major *Doria* film project—*The Mystery of the Andrea Doria*. Peter was co-producing the television special with his beautiful partner, actress Elga Andersen, who later was to become his wife. The three of us became very close; Peter was much like the older brother I never had, and Elga, like a sister.

Peter's father, Bernard F. Gimbel, was the former chairman of the Gimbel Brothers and Saks Fifth Avenue department stores found throughout the United States. Peter graduated from Deerfield Academy, Yale University and attended Columbia University. In 1946 he enlisted in the infantry and served as a Second Lieutenant with the U.S. Army of Occupation in Japan.

Peter spent eight years as an investment banker with White Weld & Co. and left after his identical twin brother, David, died of cancer at the age of 29. The terrible loss made him realize life was much too tenuous for him to work at a job in which he felt stifled and unfulfilled. So, he left to pursue a career in photo-journalism, filmmaking and global exploration.

On July 26, 1956, the day after the *Andrea Doria* sank, Gimbel was the first man to dive to the sunken luxury liner to

photograph it. The pictures were featured in Life Magazine.

In 1963 he was co-leader and photographer on an expedition to explore the unpenetrated Vilcabamba Range, in the Peruvian Andes, sponsored by the National Geographic Society and the New York Zoological Society. He pioneered use of the Para-Commander directional parachute at high altitude. The expedition was supposed to last about ten days. It lasted 89 days and after traveling 300 miles by foot, raft and canoe through jungle, ravine and swamp, the team finally reached an outpost of civilization. The resulting cover story was featured in the August 1964 issue of National Geographic. The following year Gimbel dived with



Dr. Carlton Ray beneath the Antarctic ice—wearing a wetsuit—and shot a spectacular film called *Noisy Underwater World of the Weddell Seal*.

Having encountered sharks while diving on the *Andrea Doria*, Peter's interest in them was greatly piqued, so he co-produced and shot *In The World of Sharks*. The 16mm film won a Cine Golden Eagle award.

Gimbel was an intensely creative man and during this period of his life he became extremely interested in film production. He realized that to make a big

BONAIRE



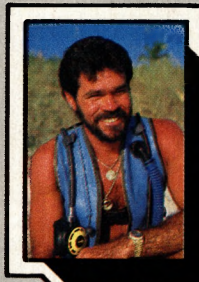
PETER HUGHES

Dive Bonaire

AT THE

DIVI FLAMINGO

BEACH HOTEL & CASINO



LEONORAS REEF

IT'S ALL THERE

Dive Bonaire's versatile fleet of dive boats bring all of Bonaire's more than 40 breathtaking dive sites within easy reach, including Washington National Park and Slagbaai marine preserve, where warm transparent seas surround unspoiled and spectacularly colored coral reefs with delicate marine life.

Divi Flamingo Beach Hotel & Casino provides comfortable guestrooms and studio apartments. It's the Caribbean's most complete dive resort, with pools, Jacuzzis, boutiques, a completely equipped conference facility, and Photo Bonaire which helps you capture your scuba adventures forever. This renowned on-site professional photo facility offers 24-hour E-6 processing, complete instruction, still photo and video equipment rental, and a full range of services for the underwater photographer. Our Peter Hughes Dive Bonaire offers complete instruction courses on all levels, from resort and certification courses to advanced, wreck and rescue dive courses.

NIKONOS SEMINARS

September 26 - October 3 Steve Frink
October 10 - 17 Jerry Schnabel and Suzi Swygert
December 5 - 12 Rick Frehsee
January 9 - 16 Scott Friar
February 27 - March 5 David Doubilet

**ADDITIONAL NIKONOS SEMINARS WILL BE LISTED IN
UPCOMING ISSUES OF SKIN DIVER MAGAZINE.**

Seminars are made possible by a grant from NIKON INC.

CALL 800-367-3484

ALM
ANTILLEAN AIRLINES

AIR-INCLUSIVE PACKAGES AVAILABLE
VIA ALM ANTILLEAN AIRLINES FROM
NEW YORK AND MIAMI.



Full cooperation with travel agents and dive professionals.

DIVI HOTELS MARKETING INC., 54 GUNDERMAN RD., ITHACA, N.Y. 14850, 607-277-3484



Peter Hughes Diving



But Not Into Your Pockets!

SEEKING TRUE DIVE ADVENTURE?
Unforgettable Dive Adventures in the exotic South Pacific.
 vanuatu • solomen isl. • fiji • australia • new guinea • tonga



Custom Tours
 designed for your
 level of adventure,
 dive skills
 and budget.

We specialize in
 dive shop groups.



CALL TOLL FREE:
 Calif. (800) 826-0057
 USA (800) 541-4334

AQUA-TREK U.S.A.
 Dive Travel Services
 P.O. Box 697
 Moss Beach, CA
 94038

PETER GIMBEL

splash in film, he'd have to come up with a spectacular subject and story. So, he came up with the idea of producing a film about the most feared and respected of sharks—the great white. A few years later this resulted in one of the most successful 35mm documentary films ever produced—*Blue Water White Death*. The film was entirely his. He was producer, director, writer and the main U/W cameraman.

During the planning stages for *Blue Water* he realized he needed a shark cage that was independent of a surface tether, with a buoyancy system that could be regulated to hover at any depth. The navy told him they had tried to solve the problem for a number of years and it couldn't be done. That was all that he had to hear. He went to work on the problem and invented a shark cage buoyancy system that he tested at some personal hazard, perfected and patented.

In 1975, Peter and Elga were on location shooting *Mystery of the Andrea Doria*. At the time Peter was 47. They had already been at sea for a month when I joined the expedition and for the remaining three weeks I got to know Gimbel pretty well. He was an extremely intelligent man and tough as nails; not the braggart tough, but the quiet, unassuming tough with a ready smile and a great sense of humor. I remember one dive he made to the seafloor 240 feet down, wearing a cold water diving dress that really wasn't state-of-the-art even then. He dragged heavy gas hoses and an electrical cable behind him and carried a 16mm camera. The water was 46°F, the current was strong, and visibility was five to eight feet. It was a damn scary place to be, and a very difficult dive, but Peter spent 48 minutes on the bottom and ended up decompressing for more than five hours. I was really impressed.

His sharp intellect was one of the qualities that attracted people to Gimbel. He was the type of individual, who if he was interested in a subject, researched it to the nth degree, whether it was filmmaking, engineering, or the marine sciences. He intimidated me at times with his precision mind, but it wasn't something he did consciously. Peter was too kind to infer you weren't mentally up to snuff with him.

Peter was tough, tenacious and bright. But, I think it was his sense of adventure that really appealed most to those of us who knew him. And, he had that most important and very necessary quality that explorers, adventures and creative men need—passion. He grabbed onto life with both hands and wrapped his arms and legs around it, too, to give it a good ride; whether it was parachuting into the Andes, diving on the *Doria*, filming under six feet of ice or facing down "Whitey." He

circle #257 on Reader Service Card

Captain Slater's
ATLANTIS
 DIVE CENTER, INC.

51 Garden Dr.
 Key Largo
 Fla 33037

FREE

Pennekamp

Dive Package \$65

Per Person/Per Day Dble Occ.

Package includes:

- Full Breakfast each morning
- Deluxe Accommodations at Howard Johnson's
- Complimentary Welcome Drink
- Bonus Coupon Package \$100+ value.
- 2 Tank Dive Trip With Atlantis Dive Center Each Day
- Tanks, Air, Backpack & Weight Belt

This pkg. available May 1st-Dec. 15, 1987. Advance reservations/3 day min. required.

5 Day Bonus Package
 Pay for 4 Days
 Get 5th Day Free

Call Atlantis Dive Center
1-800-331-DIVE
 In Fla. 305-451-1325

HOWARD
JOHNSON
 Resort 305-451-1400 Key Largo, FL

1-800-654-2000
 305-451-1400
 Key Largo, Fla.

Weekend packages
 available
 upon request

circle #161 on Reader Service Card

was, indeed, a passionate man.

Gimbel was 54 when he went into saturation for 13 days during the filming of *Andrea Doria: The Final Chapter*—something only young men in their 20s should do. The resulting special, broadcast worldwide by satellite, was one of the highest rated syndicated television presentations in history.

The highlight of the show was the opening of the first class bank safe. What was perceived to be only soggy currency turned out to be a historical first. The bank notes and traveler's checks were removed from the safe and treated by teams of distinguished paper conservators, led by Dr. Peter Sparks, Director for Preservation, Library of Congress. The preservation of the bank notes after 28 years U/W represented a first in the annals of paper conservation. The history of these bank notes is so unique they are held in the permanent collections of the country's leading maritime museums.

There was one incident only a few of Gimbel's close friends knew about: One evening, when he and Elga came home after the theater, a man with a gun tried to hold them up. Elga started giggling and said "You must be kidding!" Peter took advantage of the momentary distraction, kicked the guy in the groin and chased him off down the street. On top of being tough, he was pretty cool.

From 1957-78 Gimbel was a trustee of the New York Zoological Society. In 1986 he was awarded the distinguished Lowell Thomas Award by the Explorers Club for his work in underwater cinematography. Besides having articles published in *Life*, *Time*, *Sports Illustrated*, *National Geographic* and the *Encyclopedia Britannica*, he also wrote several television and feature film screenplays with Elga.

That's a pretty impressive resume, isn't it? But the man, like all the rest of us wasn't super human and he had his weaknesses. One of these was a lack of satisfaction with himself. He agonized over not having accomplished, or contributed, what he felt was of enough significance during his life. Like many spirited and talented people he realized there was always another mountain to climb and he had his sights set on the very top of a few more. He also felt that many people didn't accept him or his work seriously because of his wealth.

What irony! If only he could have stepped out of his body and looked at Peter Gimbel the way the rest of us did. I think that then he would have been pleased. He would have seen a self-made man who had made significant contributions to whatever aspect of science or the arts he had embraced. He would have seen a man who was greatly respected and loved. And, if he happens to be eavesdropping on us now, he'll realize it isn't only his friends and family, but anyone with an ounce of passion and adventure in his soul, who can see a tremendous void where he once stood. x

TURKS & CAICOS

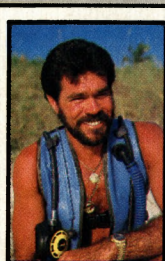
PETER HUGHES



Sea Dancer

IN THE

TURKS & CAICOS ISLANDS



VIRGIN CARIBBEAN DIVING

Peter Hughes' 110 ft. **Sea Dancer** has taken to the peaceful waters of the Turks & Caicos, an archipelago of eight exquisite beach-rimmed islands and numerous small cays. The walls of its waiting reefs harbor a magnificently prolific sea life of corals, sponges, sea turtles, polagics and hundreds of varieties of tropical fish.

Experience for yourself the thrill of a one-week diving exploration aboard **Sea Dancer**, combining the barefoot elegance of Divi Hotels with the hassle-free diving system Peter Hughes has long been famous for.

You'll find this extraordinary "floating dive resort" unparalleled among diving liveaboards for efficiency, comfort and beauty:

- Eight twin-berthed double cabins plus four master staterooms, three with queen-size beds, all air-conditioned.
- Complete unlimited diving freedom, with on-board compressors that allow unlimited airfills. Tanks, backpacks, weights and weightbelt are provided.
- On-board photo lab for daily E-6 processing.
- Comfortable alfresco dining above deck.
- One Zodiac and one 16' dinghy for quick and easy trips ashore.
- Additional watersports equipment including sailboards.
- Mini-boutique.
- Professional and personable service that you're accustomed to at other Peter Hughes Diving operations.

From **\$1095.** Per person. Price includes meals, all beverages, unlimited diving, roundtrip transfers, and govt. room tax. 8 days/7 nights, Sun.-Sun., twin-berthed double cabin.



CALL 800-367-3484

DIVI HOTELS MARKETING INC., 54 GUNDERMAN RD., ITHACA, N.Y. 14850, 607-277-3484



Peter Hughes Diving

Treasure Island

DIVE RESORT

Grand Cayman, BWI

LOCATED ON
GRAND CAYMAN'S FAMOUS
SEVEN MILE BEACH



Grand Cayman's Newest and Fin- est Full Service Dive Resort

The new Treasure Island Dive Resort brings comfort, economy, and diver convenience to an island already world famous for magnificent diving. With three custom 45-foot dive boats, a 65-foot air-conditioned live-aboard dive boat, complete under-water photo center, dockside dive shop, and a staff of experienced Cayman dive professionals, Treasure Island is designed to provide maximum diver service.

Treasure Island Dive Resort features deluxe air-conditioned rooms with color satellite TV, Grand Cayman's finest night club, two fresh water swimming pools, superior dining, and complete water sports along our beautiful sand beach.

**Treasure Island
Dive Resort...
Your Key to
Cayman Dive
Adventure.**



It costs no more to experience the best of Grand Cayman

3 nights \$225*
5 nights \$398*

Enjoy significant savings with our condominium packages.

For more information call:

1-800-223-4707

1-800-367-4707 (in Florida)

*per person double occupancy, including accommodations, boat dives, and unlimited shore diving.



PADI COURSE DIRECTOR SAVES A LIFE

Len Bucko, a PADI course director on staff at PADI International College, recently saved the life of a boy involved in a waterslide accident.

Apparently, the victim had fallen off an innertube into rapidly moving water. The victim had been swept under, ingested water and stopped breathing. Bucko ran to the scene and pulled the victim onto dry land.

Bucko was able to revive the victim using his medic first aid skills. "The incident proved to me once again the value of all my training as a medic first aid instructor," said Len, "I acted immediately and everything flowed. It was just like being in the classroom working with Annie, except that the patient opened his eyes and smiled." 🐠

HERB AND CORA TAYLOR

Herb and Cora Taylor, well loved members of the diving community and owners of Pisces Books, died July 14 when the small private plane in which they were riding crashed into a fog-shrouded mountain in Maine.

Herb, 45, who began diving in the late '50s, was well known as a writer and underwater photographer. He specialized in marine sciences and the technical aspects of photography. His work has appeared in many publications including SKIN DIVER, The New York Times, Reader's Digest, Oceans, National Fisherman, Minolta Mirror and the Ocean World of Jacques Cousteau series.

Herb is the author of *The Lobster: Its Life Cycle*, which was selected by the N.Y. Academy of Science as one of the best of its kind for young adults. He also authored a Nikonos handbook and *The Sport Diving Catalog* and co-authored *The Joy of Snorkeling*.

Cora, 46, born into a prominent Philippine publishing family, began diving when she married Herb. As diving and business partners Herb and Cora complemented each other in their endeavors—Herb with his creative skills and vision and Cora with her managerial skills and ability to implement ideas.

As founders of Pisces Books in Glen Cove, NY, the Taylors issued a wide range of books on diving, snorkeling and the underwater environment. Among them are Duncan Mathewson's *Treasure of the Atocha*, Carl Roessler's *Undersea Predators*, Hillary Hauser and SKIN DIVER Magazine's *Book of Fishes*, George Lewbel's *Decompression Workbook*, the DAN *Underwater Diving Accident Manual* and *Diving Emergency Handbook* and 11 diving travel guides.

Pisces Books will continue to operate and publish new titles already planned.

Herb was a sensitive diver aware of the beauty and fragility of the undersea envi-

You don't
have to be
an American
to die of a
heart attack.



You also don't have to overeat. Or consume excessive amounts of cholesterol. Or ignore high blood pressure. Or smoke. But that's what a large segment of this country's population does. And that's one reason the United States has the highest incidence of heart attack in the world. At the American Heart Association, we're trying to help Americans change the way they live. And die.



**American Heart
Association**

WE'RE FIGHTING FOR
YOUR LIFE

This space provided as a public service.



circle #163 on Reader Service Card

ronment. Herb and Cora were known for their sincerity, compassion and integrity with both their friends and business associates. They and their contributions to sport diving will be sorely missed.

The Taylors are survived by her children Christina and Jacqueline Marquez. Herb is survived by his parents, Herbert and Jennie Taylor and his sister JoAnne Zeankowski, all of Brooklyn. Cora is survived by her mother, Allegría Sibal of Manila, and eight brothers and sisters.

Their families are requesting contributions in Herb and Cora's memory be sent to the Divers Alert Network, P.O. Box 3823, Duke University Medical Center, Durham, NC 27710. 🐠

TEITEL/SAND DOLLAR

Pam Teitel recently joined the staff of Sand Dollar Dive and Photo, Bonaire, as assistant manager and instructor. Teitel has five years of teaching experience. She and Andre Nahr teach courses from resort through assistant instructor.

Part owner of the operation, Nahr has been diving for more than 20 years. A native of Curacao, his knowledge of the waters surrounding Bonaire is excellent.

Since Teitel speaks Swedish, courses are available in that language as well as English, Spanish, German, Papiamentu and Dutch.

For more information on diving and accommodations contact the Travel Barn, 50 Georgetown Road, Bordentown, NJ 08505. In NJ call (609) 298-2298 or toll free (800) 345-0508. 🐠

AQUANAUT EXPLORER/BVI

The 165 foot *Aquanaut Explorer* is now accepting reservations for immediate bookings in the British Virgin Islands. Captain Eric Heindl, vice president of Aquanaut Cruise Lines, reports that the live-aboard ship is capable of accommodating up to 44 passengers.

The *Explorer* has more than 6,000 square feet of deck space that includes an open air restaurant, bar, dive shop, photo lab, gift shop and air-conditioned dining room. All staterooms are air-conditioned with private bathrooms and some even include private balconies.

During the week's stay on the *Aquanaut Explorer* guests will dive up to seven different islands in seven days as well as the wreck of the *Rhone*.

On board activities include TV movies, underwater videos, slide shows, music and dancing.

Gerry Hytha, master of the *Aquanaut Explorer* and Tom McShane, first officer, advise that resort and certification courses are also available for nondivers.

Homeport for the *Explorer* is Roadtown, Tortola, BVI where the ship departs every Friday. For more information concerning the *Aquanaut Explorer*, contact Aquanaut Cruise Lines (800) 327-8223, (800) 432-8894 (in FL) or (305) 491-0333. 🐠

CAYMAN BRAC

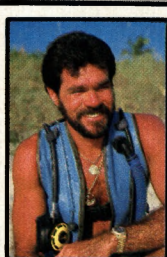
Dive
Tiara

PETER HUGHES

DIVE TIARA

AT THE

DIVI TIARA BEACH HOTEL



BLOODY BAY WALL

THE WAY CAYMAN USED TO BE

The Peter Hughes Dive Tiara hassle-free dive catering system offers nothing short of a luxury dive experience. Five custom-designed dive boats speed divers to the spectacular walls of Cayman Brac and Little Cayman where the underwater world shows you multitudes of fish, impressive and rare beautiful black coral formations, and the most incredible barrel sponges to be found anywhere in the Caribbean.

Divi Tiara Beach Hotel is small and secluded, with just 42 rooms (4 with jacuzzis). Beautiful palm-fringed beach, tennis court, gorgeous freshwater pool, sailboards, paddleboats and bicycles...Divi Tiara has just what you need for a relaxing and memorable dive vacation.

The Divi-Inclusive package at Tiara is a super value...includes comfortable air-conditioned room, 3 meals daily, unlimited bar beverages, tips and taxes and more! Call for more information.

**DIRECT JET SERVICE TO THE BRAC
FOR THE SAME PRICE AS GRAND CAYMAN.**

CALL 800-367-3484



Full cooperation with travel agents and dive professionals.

DIVI HOTELS MARKETING INC., 54 GUNDERMAN RD., ITHACA, N.Y. 14850, 607-277-3484



Peter Hughes Diving

Diving News From Down Under

The Coral Sea's Fabulous Osprey Reef

TEXT AND PHOTOGRAPHY BY GERI MURPHY

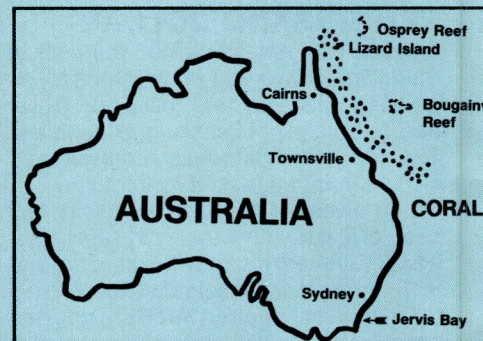
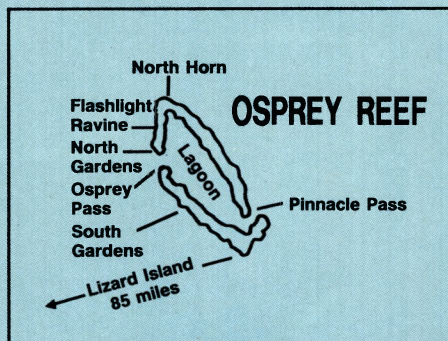
If you're looking for the best dive spot in the world, your quest is likely to lead you to Australia's phenomenal Coral Sea. This immense oceanic region covers almost one-half million square miles of crystalline sea dotted by a handful of uninhabited coral atolls. There is no place on earth where the U/W visibility is better or the fish life more exciting.

Precisely where in this vast open sea would you find the very best dive site? Those who have sailed and dived this ocean might nominate Osprey Reef as the major contender. Osprey is the northernmost of the remote Coral Sea atolls. It is closer to the equator than Marion, Diamond, Flinders or Bougainville Reefs. And yet, Osprey is one of the atolls closest to the Australian mainland. It lies 85 miles northeast of Lizard Island and 70 miles from Cormorant Pass on the outer edge of the Great Barrier Reef. As you may recall, Cormorant Pass is the home of those world famous giant potato cod at the Cod Hole. The trip can be made in six to seven hours.

Because Osprey Reef is comparatively close to the Australian coast, it is a popular dive location for long range live-aboard boats operating out of Cairns. The general itinerary for such a cruise starts with a run from Cairns to Bougainville Reef, northward to Osprey, southwest to the Cod Hole and then a return along the Ribbons Reefs to Cairns.

Osprey is sort of a miniature version of Marion Reef, except all of the diving is done outside rather than inside the barrier reef. Oblong in shape, Osprey consists of a coral barrier reef that comes right to the surface from a depth of 6,000 feet. The atoll is seven miles long from north to south and two miles wide from east to west. The barrier reef encircles the lagoon with the exception of one open pass on the west side through which a dive boat can enter. The inside of the lagoon is a calm anchorage with depths reaching 60 feet.

Aside from the main pass, there is one other channel on the east side, barely large enough for a skiff. There are no islands on the barrier reef and therefore, no people. Pollution is non-existent.



The 79 foot *Coralita* makes regularly scheduled visits to remote Osprey Reef. Osprey is the northernmost of the Coral Sea atolls and 85 miles from Lizard Island. Below: photographing soft coral; a leopard shark.



Osprey's main attraction is a dive site at its northern tip known as North Horn. The west side of this point is a fabulous drop-off covered with gigantic seafans in a variety of brilliant colors. The largest ones are bright yellow with others in hues of either orange or red. The area is also overgrown with huge soft corals measuring three to six feet tall.

The area directly off the tip of North Horn is probably the busiest fish location in the Coral Sea. The reef begins at the surface and slants downward on a 45 degree angle to 70 feet. Here it shelves off a bit before dropping vertically to 6,000 feet. The wall is loaded with an incredible array of giant moray eels, schools of large barracudas, friendly potato cod, gigantic Queensland groupers and magnificent manta rays. The guide generally sets

up a shark feeding event on the 70 foot shelf, generating a high voltage show.

North Horn is not the only attraction at Osprey Reef. Its entire western side has many magnificent stony corals in shallow water. The reef is teeming with small fish, *Tridacna* clams, small soft corals, brightly colored nudibranchs and hundreds of other macro critters. This area is divided into two parts by the pass and these are known as North and South Gardens.

Perhaps the most exotic dive site of Osprey Reef is a place called Flashlight Ravine. Midway along North Gardens is a crack. While it is not large enough to accommodate a boat, divers can swim through it to the outside. At night, the edge of this tiny channel has thousands of rare flashlightfish. Normally a deep water nocturnal creature, these incredible

bioluminescent fish come up to within 40 feet of the surface—apparently attracted by the warmer water flowing out of the solar heated lagoon.

Still another high voltage dive site is the northern edge of Osprey Pass. This area is frequented by large stingrays, big barracudas, manta rays and, occasionally, sharks. The flow of water in and out of the lagoon pass acts as a beacon for attracting pelagic fish of all kinds.

While Osprey Reef remains remote and untouched, it is a regularly scheduled dive location for the M/V *Coralita*. This 79 foot live-aboard is powered by twin Caterpillar diesel engines, cruises at 11 knots and has a cruising range of 2,000 miles. Designed to accommodate up to 12 passengers, it is one of the few Australian live-aboard dive boats with a Commonwealth Survey certificate that allows offshore cruising in the Coral Sea. The *Coralita* operates regularly scheduled cruises from September to January.

For more information about live-aboard dive trips to Osprey Reef contact Dive In Australia, 50 Francisco Street, Suite 205, San Francisco, CA 94133; (415) 421-5588.

EXOTIC TRIPS

(Continued from Page 93)

with Air Niugini and Air Pacific).

These four premier dive areas are five degrees above or below the equator and rightly claim to be home to the world's greatest diving with prolific marine life, visibility of 100 feet plus everyday and water temperatures of 85-92°F. Leave your wetsuit at home and instead, bring extra cameras and plenty of film. This area is a "must" for every serious diver and underwater photographer. God's Gardens are waiting. La Mer has your ticket. For information contact La Mer Diving Seafari, Inc., 823 United Nations Plaza, Suite 817, New York, NY 10017; (800) DIVE-NOW or (212) 599-0886.

TIPPING AT AKR

The 78 employees of Anthony's Key Resort in the Bay Islands of Honduras have voted unanimously that guests wishing to tip should instead contribute the money to an education fund. This will enable employees' children, brothers and sisters to attend one of the private bilingual (English and Spanish) schools on the island of Roatan.

The fund, started in January and administered entirely by the employees, currently assists 61 children.

The goal of the fund as expressed by an employee board member is to "aid the many bright children of the Bay Islands to realize their potentials—to help them become bookkeepers, divemasters, lawyers, teachers or whatever their special talents permit."

BARBADOS



PETER HUGHES

Underwater Barbados

AT THE **DIVI SOUTHWINDS BEACH HOTEL**

Unquestionably the finest scuba diving operation on Barbados, offering the safe, hassle-free diving found at other Peter Hughes dive resorts! Stay in comfortable studios or suites at Divi Southwinds Beach Hotel in Barbados' lively St. Lawrence Gap area, while diving the many exciting wrecks that lie in the shallow waters surrounding this beautiful island. Or dive the densely adorned barrier reefs, a must for all divers.

CALL 800-367-3484

Full cooperation with dive travel professionals.

 **DIVI HOTELS MARKETING INC., 54 GUNDERMAN RD., ITHACA, N.Y. 14850, 607-277-3484**



Peter Hughes Diving

circle #166 on Reader Service Card



Dive First Class

Now there is a first class diving vacation. **Don Foster's Dive** is open at the **Grand Pavilion Hotel and Beach Club**, one of the Caribbean's newest and most desirable resorts.

While you're discovering Grand Cayman's incredible diving, you can now also enjoy the luxury of first class accommodations. The Grand Pavilion provides sumptuous rooms, gourmet dining, entertainment and a wealth of activities. And Seven Mile Beach is just moments away.

If you're a discriminating diver looking for the finest of everything in your vacation, contact **Scuba Tours, Inc.**, 1-800-526-1394, or (201) 256-9155.

GRAND PAVILION
HOTEL AND BEACH CLUB



DON FOSTER'S Dive
Grand Cayman Ltd.
P.O. Box 151
Grand Cayman, Cayman Island
B.W.I.

circle #167 on Reader Service Card

DIVE PACKAGES

HOLIDAY BEACH HOTEL

Curaçao
WE HAVE A STYLE ALL OUR OWN



Curaçao
WE HAVE A STYLE ALL OUR OWN



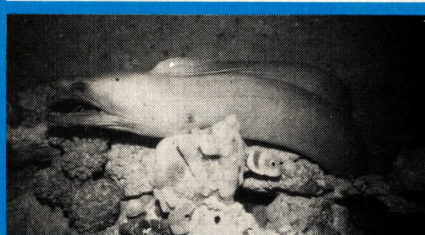
Curaçao
WE HAVE A STYLE ALL OUR OWN



Curaçao
WE HAVE A STYLE ALL OUR OWN



Curaçao
WE HAVE A STYLE ALL OUR OWN



8 DAYS/7 NIGHTS

SINGLE— 6 DIVES \$633.80
DOUBLE—6 DIVES \$837.70
SINGLE— 4 DIVES \$529.90
DOUBLE—4 DIVES \$629.90

PACKAGE FEATURES

- Full American Breakfast (only in the 6 Dive Pkg.)
- Roundtrip Transfers between Airport & Hotel
- Unlimited Use of Curacao Seaquarium
- Daytime Tennis
- Tax & Service Charge on Room and Breakfast

DIVE FEATURES

- Includes Tank, Backpack, Weights, and Weightbelt
- Unlimited Use of the Tank with Free Airfills
- Transfers between Hotel & Dive Shop
- Service Charge on Diving

Pater Euwensweg, Willemstad • Netherlands Antilles
Phone: 625400 • Telex: 3317 NA • P.O. Box 2178

MASTERDIVE REEF ADVENTURES



MASTERDIVE REEF ADVENTURES AT THE CORAL CLIFF RESORT AND BEACH CLUB

COME TO OUR CLIFF... WE ARE MASTERS AT DIVING

Fabulous Dive Sites of Curacao's Crystalline South Coast.
A PADI Training Facility. We Also Give Instructions.



COMPLETE CORAL CLIFF HOTEL/DIVE PKG. • 7 NIGHTS/8 DAYS

- 12 Boat Dives
- Unlimited use of Tank & Weights
- Hotel includes Breakfast & Dinner

April 16-Dec. 14 '87 \$600.00
Dec. 15-April 15 '88 \$700.00

For reservation and information, please contact:

MASTERDIVE INC. • Phone 54312 • Telex: 3015 CASIM NA or write: P.O. Box 3582
Fokkerweg 13 • Curacao, Neth. Antilles or CORAL CLIFF RESORT AND BEACH CLUB
Phone 641610 or write P.O. Box 3782 • Santa Martha-Curacao, Neth. Antilles

PISCADERA WATERSPORTS



DIVE PISCADERA WATERSPORTS AT THE

CURACAO CARIBBEAN HOTEL & CASINO



Our Package Include:

5 Day/4 Night Package

\$249.00 p/p, dbl. occ.

8 Day/7 Night Package

\$389.00 p/p, dbl. occ.

Rates are subject to a 10% service charge and 5% government room tax.

DIVE FEATURES

- 4 Nights Pkg. includes 5 Dives
- 7 Nights Pkg. includes 10 Dives
- Guided Boat Dives
- All Standard Equipment

HOTEL FEATURES

- Welcome Cocktail
- \$10 Casino Coupon
- Sunset Cocktail Party (Wednesday)
- Air conditioned Room with Balcony

For More Information and Reservations, Consult Your Travel Agent

CARIBBEAN HOSPITALITY CORPORATION

Penthouse Suite 7th Floor • 548 Fifth Avenue • New York, N.Y. 10036
Mr. Ralph M. Rodriguez, Jr. and Mr. Richard Rodriguez • Tel.: (212) 764-0755

PRINCESS BEACH HOTEL & CASINO



DIVE
CURACAO &
WATERSPORTS

Director: Oswaldo Serberie

A full service diver's business, at the PRINCESS BEACH HOTEL & CASINO, just where "Curacao Underwater Park" starts, offers you: wreck, wall, night dives, and much more.

5 DAYS/4 NIGHTS • ONE DIVE A DAY

PACKAGE INCLUDES

SINGLE \$240.00 per person
DOUBLE \$180.00 per person
TRIPLE \$160.00 per person

Rates are subject to a 10% service charge and 5% government room tax.

- 4 Dives off Curacao Coast incl. Underwater Park
- Certified Guides and Instructors
- Dive Equipment (Tanks and Weights)
- Welcome Cocktail on Arrival
- \$10 Casino Chips Per Person
- Free Asst. to Mgr's. Cocktail Party (Fri.)
- Discount Booklet
- Free Shuttle Service to Downtown
- Free Use of Tennis Court
- Free Use of Beach and Pool Lounges



princess beach
hotel & casino

PRINCESS BEACH HOTEL & CASINO

Tel. 614944 Telex: 1268 ISLES NA

Dr. Martin Luther King Blvd., Willemstad, Curacao, N.A.

Or Contact: I.T.R. • 25 West 39th St., N.Y., N.Y. 10018 • (212) 840-6636 or (800) 223-9815

Every day is a new discovery when you dive Curacao. The weather is perfect 365 days a year. The water is in the 70's except when it's in the 80's. Visibility's unlimited. The Underwater Park of Curacao—over 12 miles of pristine sites... a coral reef sanctuary created just for you and a few million species of marine life.

Take the Plunge! Everything you ever wanted in a Caribbean Dive Vacation and more.

See your travel agent or contact:

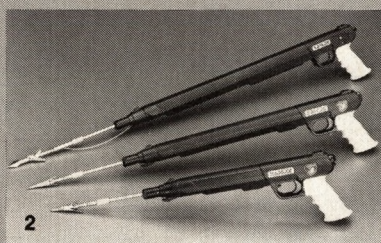
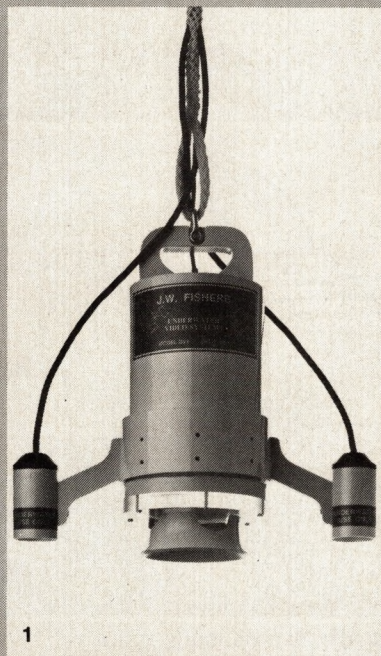
The Curacao Tourist Board

400 Madison Avenue • Suite 311 • New York, New York 10017
(212) 751-8266

The above dive packages valid thru December 15, 1987.

NEW FOR '87

The products listed in New for '87 are those that the editors feel are of interest to readers. All specifications and claims are supplied by the manufacturers or sellers, who bear responsibility for their accuracy. It is impossible for SKIN DIVER to obtain samples of all products listed for evaluation and verification of manufacturers' claims. The listing is provided as a free service and vendors of U/W equipment are invited to submit information and black and white photos for consideration.



1 Dropline Video—The DV-1 Dropped Video System allows a visual search of the ocean bottom to be made while the observer is in a boat. It includes a B/W camera with a 60 degree wide angle lens, two 100 watt lights and 150 feet of cable. J.W. Fishers Mfg.—\$1,895.

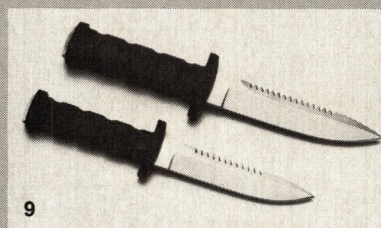
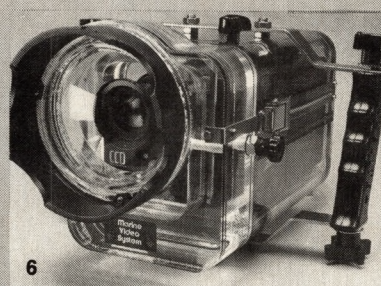
2 Pneumatic Spearguns—Ranger pneumatic spearguns from Bandito/Aquacraft II are lightweight and feature smooth trigger action and high power. Optional high and low power settings. Ranger 70 (longest gun) is \$169.95. Ranger 60 is \$149.95. Mini Ranger is \$145.95.



3 BC With Weight Pockets—The Speed Pac BC has dual opening pockets that can hold 36 pounds of lead. Available in eight colors, one size fits all. Suggested retail is \$269.99. See your dive store or for information call Zeagle Systems (813) 782-5568.

4 Color Coordinated Wetsuits—Parkway wetsuits are color coordinated with its BC system. Fiero is black with red sleeves and neck and Mercury is black with silver sleeves and neck. Both have legged jacket and farmer john in 1/4 inch (\$345) or 1/2 inch (\$293).

5 Titanium Watches—Tabata offers titanium dive watches in several sizes and color combinations. Water resistant to 200 meters, their surfaces are coated with rugged plasma iron plating to resist scratches, fading and peeling—\$560.



6 Video Case—Ikelite's Marine Video Case fits the JVC OR-C7, Zenith VM-6200 and Toshiba SK-60 camcorders. External controls are provided and the clear polycarbonate housing allows visual inspection of the interior. Working depth is 150 feet—\$695.

7 Dive Mask—The TUSA Liberator mask from Tabata features a clear silicone skirt, easy strap adjustment and a choice of frame colors: cobalt blue, aqua, pink, lavender, yellow and dark gray—\$62. Corrective lenses (\$60 a pair) are available

8 Sportswatch—Heuer's Formula 1 sportswatch comes in all black as shown or in five eye-catching color combinations. Water resistant to 200 meters, it features a uni-directional bezel, date window and high tensile strength synthetic band—\$145.

9 Sawtooth Knife—This Dacor knife has a 420A stainless steel blade. The shaft extends through the handle to make a pounding surface on the butt. Sawteeth are ground at an angle for better cutting. With 4 1/2 inch blade, \$21. With 5 inch blade, \$25.

Summer TURKS &

A world of virgin reefs, brilliant marine life, Mantas, Eagle Rays and fabulous dropoffs... the last unspoiled diving in the Caribbean.

Omega Divers & Hotel Kittina On Grand Turk



OMEGA DIVERS
THE ADVENTURE BEGINS



Omega Divers & Hotel Kittina

The Very Best of Everything

for information or to book your Adventure

Call 1-800-843-7544

in Fla. call collect 305-385-0779

circle #188 on Reader Service Card

PREMIERE SEA DANCER

The Newest Live-Aboard in the Caribbean makes its Debut!

Now, for the first time, enjoy your own private cabin aboard this luxurious 110 Ft. Live-Aboard, and DIVE Grand Turk, Provo, and the "secret" sites of North, West, and South Caicos.

Your host is Peter Hughes Diving.

His systems of excellence that have made Flamingo Beach Hotel and the

Tiara Beach two of the most successful dive resorts in the world is now available on this luxurious floating hotel.

ONE WEEK DIVE

PACKAGE PRICE: \$995.00

FOR MORE INFORMATION CALL: 1-800-367-DIVI

circle #169 on Reader Service Card

Aquanaut

Live aboard the new 45 ft. Catamaran **AQUANAUT** and have unlimited access to the best diving in the Turks, Provo & West Caicos (depending on the season).

Highly professional and very personalized service makes for a memorable dive trip for small groups of 3-6.



See & Sea
TRAVEL SERVICE, INC.
50 FRANCISCO ST./STE. 205
SAN FRANCISCO, CA 94133
TELEPHONE (415) 434-3400

Call the Dive Experts at 1-800-DIV-XPRT

circle #170 on Reader Service Card

Third Turtle Inn

Have you discovered the newest diving paradise?

PROVIDENCIALES
Turks and Caicos Islands



third turtle
inn

- Professional Dive Shop
- 3 Dive Boats
- Luxurious Accommodations
- Gourmet Dining
- Group Rates Available
- Spectacular Diving

For Information and Reservations (1-800-323-7600)
In Illinois or Canada (1-312-655-5678)

circle #258 on Reader Service Card

Specials

CAICOS

For more information, contact the
TURKS & CAICOS TOURIST BOARD
 121 S.E. 1st Street • Suite 510 • Miami, Florida 33131
 305-577-0133 • 800-441-4419

WET PLEASURES LTD.

Providenciales' newest Watersports Centre

DIVE WEST CAICOS—FRENCH CAY AND PROVO'S WALL
LARGE CUSTOM DIVE BOATS—WRITE OR CALL
WET PLEASURES, P.O. Box 526002, Miami, FL 33152
Tosh and Jody McIntosh (809) 946-4455
PACKAGES WITH ADJACENT HOTELS AND VILLAS

MARINER HOTEL	CHALK SOUND VILLAS	NAUTILUS VILLAS
809-946-4488	free standing waterfront villas	809-946-4286
	404-351-2200	514-457-9060

circle #171 on Reader Service Card

Erebus & Provo Turtle Divers



French restaurant and unique lounge atop a romantic hillside, overlooking Turtle Cove Bay. Tennis Courts and swimming pools available.

SPECIAL SUMMER PACKAGE

7 Nights/6-2 Tank Dives • \$545.00 pp., dbl. occ.



Provo Turtle Divers, Ltd.

A full service sanctioned
PADI training facility.

Contact: 1-800-351-8261

EREBUS HOTEL: 809-946-4240
 PROVO TURTLE DIVERS: 809-946-4232
 P.O. Box 526002 • Miami, Fla. 33152

circle #172 on Reader Service Card

Island Princess & Provo Turtle Divers

Discover The Island Princess... Before The Rest Of The World Does!

ISLAND PRINCESS

SUMMER SPECIAL

8 Days/7 Nights including Room—Taxi—

Roundtrip Airfare

From N.Y. \$559.00 pp,dbl.occ. • From Miami \$439.00 pp,dbl.occ.



Provo Turtle Divers, Ltd.

A full service sanctioned
PADI training facility.

Call: 1-800-227-2157

and ask for I.P. SPECIAL

ISLAND PRINCESS: 809-946-4260
 PROVO TURTLE DIVERS: 809-946-4232

circle #173 on Reader Service Card

Island Reef Hotel

ISLAND REEF HOTEL

- 21 Comfortable Rooms
- Efficiencies and 1 Bedrooms
- All rooms w/kitchen, and air-conditioning
- Pool and Tennis
- Restaurant and Bar
- Car rental available

For Dive Package information call:

Island Reef Hotel

TMB 10, Grand Turk, Turks & Caicos, BWI
 Call (809) 946-2055, or 1-800-634-DIVE
 In Texas (713) 359-DIVE

circle #174 on Reader Service Card

Salt Raker Inn & Blue Water Divers



SALT RAKER INN

**DIVE THE SPECTACULAR
 GRAND TURK WALL**
 from your doorstep at the Salt Raker Inn.

AUTUMN SPECIAL

\$430 pp., dbl. occ.

Offer expires Nov. 30.

Includes 7 Nights Hotel Accommodations, 12 Boat Dives with
 Guide Service, Tanks and Weights, Welcome Drink.

Offer available through Direct Bookings Only

CALL SALT RAKER INN

1-809-946-2260

OR WRITE BLUE WATER DIVERS

P.O. Box 124, Grand Turk, Turks & Caicos, BWI



Blue Water
Divers

circle #175 on Reader Service Card

Dive Inn.

Dive Inn to the Holiday Inn Beach Resort and find out why there's more to a Bahamas diving vacation than just diving.

3 DIVES A DAY

This special package includes up to three different boat dives per day, plus night dives. This is "hassle-free" diving at its finest.

The program is based at the Holiday Inn, Freeport/Lucaya Beach Resort. It's one of the most popular resort hotels in the entire Caribbean, located on a gorgeous white sand beach on Grand Bahama Island. These are real quality accommodations with air conditioning and full American television. As Holiday Inn says, "No Surprises."

LOTS OF ACTIVITIES

Parasailing, water skiing, sailing, tennis, a beautiful swimming pool, three restaurants, three bars, a lively disco and dazzling island floor show are all available right at your hotel. And, you're only five minutes away from an action-packed casino, other fine restaurants and entertainment. This is one Island that gives you a real choice of evening pleasures.

WORLD'S #1 DIVE DESTINATION

Year after year SKIN DIVER readers pick the Bahamas as the world's number one dive destination. Water clarity, marine life, comfort and convenience are obvious reasons.

UNEXSO is probably the world's best equipped dive resort. At UNEXSO, you will find a great variety of diving, including Theo's Wreck at 100 ft., abundant corals and fish, and a gorgeous shallow reef for available light photography. Freeport is only 20 minutes by jet from Miami. Don't spend your vacation travelling; spend it diving.



AND NOW - LOW PRICE

4 DAYS/3 NIGHTS

\$263 PER PERSON
DOUBLE OCCUPANCY

\$358 single, \$242 triple. Non-Divers deduct \$159.

8 DAYS/7 NIGHTS

\$520 PER PERSON
DOUBLE OCCUPANCY

\$744 single, \$470 triple. Non-Divers deduct \$278.

Prices per person include all necessary taxes and gratuities at the destination. Rates effective 4/19/87 - 12/18/87.

FOR RESERVATIONS

information, and winter rates, see your Travel Agent or call toll free:

1-800-992-DIVE
IN FLORIDA: (305) 761-7679

Holiday Inn®

**UNDERWATER
EXPLORERS
SOCIETY
UNEXSO**

Box F-2433-FREEPORT, BAHAMAS

SURFSIDE EXPLORER

(Continued from Page 97)

tops are quite small, easily circumnavigated in a single dive. The pinnacles are best explored in groups of four to six people and are a real diving kick. Experienced divers, ask to see Eye of the Needle. I don't think you'll ever forget it.

While you're free to explore Saba's delights at any time, the *Explorer* usually hosts one group dinner ashore at Queen's Quarters, the premier restaurant on the island. Make sure to ask your Saba taxi drivers to tell you all their local stories and jokes. They're very interesting and sometimes funny!

After several days of diving Saba, we headed for St. Eustatius, also called Statia. It is also small, with a population around 1,200. It was a bustling seaport during the 1700s. There are historical remains on land and beneath the sea. Shipwrecks are the main diving attraction. Their ballast stones are transformed into vibrant living reefs teeming with squirrelfish, snappers, eels and southern stingrays. Flying gurnards—pretty blue winged fish—are also abundant.

On land, explore the fort and town. If you like to walk or hike, try the Quill, a dormant volcano at one end of the island. It's possible to hike up and into the volcano. The flora and scenery are great but the trip takes several hours, so plan your diving accordingly.

For true open ocean adventure, the *Surfside Explorer* also schedules trips to Saba Bank, which would be the largest island in the area if it weren't 30 feet underwater. The diving here is truly virgin and pelagics are the rule rather than the exception. The bank itself is mostly sand, but the edges are coral drop-offs. The few divers who have been here usually describe it as "wild."

It's a leisurely return to St. Maarten after that, well in time to catch a little shopping or entertainment before flying home. By that time, the hard working crew members are all your new friends. Captain Ron Palmer is a veteran ocean operator and dive instructor as well. Gerry Matt is first mate, engineer, instructor and photo pro. Lynn Laymon and Linda Walden are NAUI instructors, ex-AT&T executives and divemasters. Chief cook and hostess Gina Rawson, in addition to preparing excellent meals, can tell you all about shopping and exploring on the islands.

That's the *Surfside Explorer*. In addition to diving some really neat spots, it offers the opportunity to easily cruise three different and unusual islands. It's a great idea, and it works, thanks to a well designed boat and a hard working, personable crew. For more information contact Surfside, U.S.A., 1838-40 North Main Avenue, Scranton, PA 18508; (717) 346-6382 or (800) 468-1708.

There Are 7000 Beautiful Reasons To Dive The Philippines

PHILIPPINE ISLANDS



Nudibranch

The islands of the Philippines . . . a diver's paradise of crystal waters and virgin reefs . . . served with comfort and convenience by Philippine Airlines. With over 7,000 islands to choose from, we offer more dive sites with more variety than any other country in the world. You will be

guided by diving professionals . . . visiting spectacular reefs, historic wrecks and seeing the most diverse array

of underwater marine life in the world. The topside choices are as varied

as our diving . . . choose a

luxury live-aboard or a dedicated beachfront dive resort . . . you'll discover the very special hospitality of the Philippine people and experience the excitement of one of the world's truly unique diving destinations. Come celebrate the

Philippines with Philippine Airlines.

Contact us today for details on fly/dive packages.



Diver viewing crinoids



Tubastrea corals

Packages from \$1149⁰⁰

Includes roundtrip airfare, all transfers, accommodations, diving and meals. Call for details.



Philippine Airlines

**We're One
Great Reason To Fly**

Information on diving the Philippines may also be obtained by contacting:

SEE & SEA
Travel Service, Inc.
1-800-DIV-XPRT
1-415-434-3400

OR POSEIDON VENTURES TOURS
1-800-854-9334
1-714-644-5344

Call: 1-800-554-5444, 1-415-391-0270 or send for information:

Name

Address

City State Zip

Send to: Philippine Airlines, 447 Sutter St., San Francisco, CA 94108

Vacation in Luxury



Hamlet's non-attached sea-front villas are a new concept in vacation luxury. They are beautifully and completely furnished and have a private white sand beach in front.

All villas have two double rooms on the second floor and a lavish suite on the ground floor. Each has air conditioning and hot water.

Magnificent deluxe suites have full modern kitchens and waterfront verandas.

Our superior doubles have spacious balconys overlooking the water, and some have roof top solariums.

Luxury, real comfort and scenic beauty; it's all for your personal pleasure.

Enjoy unlimited diving and open air sea-side dining.

Arrangements can be made at the neighboring Captain Don's Habitat, a full-service resort facility.

Treat yourself to something special. You can rent all or part of a villa and have the vacation of your dreams.

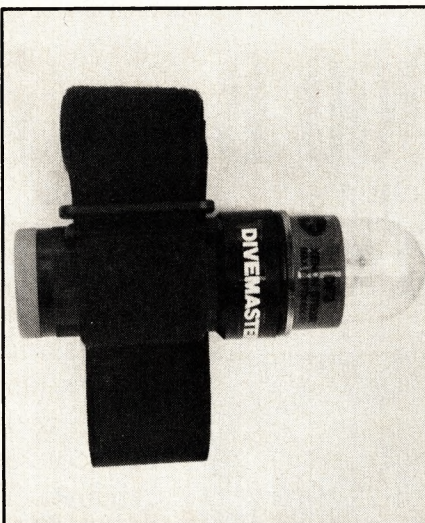
LOW OFF-SEASON RATES

For reservations & information:

Scott Calder International, Inc.
152 Madison Ave, New York, N.Y. 10016
(212) 535-9530, (800) 223-5581
US: Dial direct-011-599-7-8290
Telex - 1926 HAMBO NA

The Hamlet

BONAIRE • N.A.



DACOR'S XENON STROBE

A Guiding Light

BY JIM WALKER

To make an ascent along your dive boat's anchorline, you first have to find it. During the day this can be tough unless the water is crystal clear, but at night it's impossible unless the anchorline has a light attached. To find your shore

photos/Bonnie J. Cardone



One alkaline C-cell will power the Dacor DF3 Xenon Strobe Light for about 28 hours. The bulb/lens assembly screws into the case, sealing with two O-rings.

THE BOTTOM LINE ON TOP TIME

LET'S FACE IT.
THE BOTTOM LINE IS:

**MOST DIVERS DON'T
GET ENOUGH DIVE TIME**

IF DIVING IS YOUR PASSION
THE COMPLETE DIVER AUDIO SEMINAR
is for you.

OWN A PERSONAL AUDIO DIVE LIBRARY

Divers, benefit from the skills of professional instructors, treasure salvors, photographers and marine archaeologists. Learn new skills without the time and expense of attending professional dive courses.

Imagine having tape cassette access to:

- 1001 BASIC U/W PHOTOGRAPHY
- 1002 U/W VIDEO PRODUCTION
- 1003 CAVE DIVING
- 1004 NIGHT DIVING
- 1005 WRECK DIVING
- 1006 UNDERWATER HUNTING
- 1007 TREASURE SALVAGE TECHNIQUES
- 1008 SPANISH TREASURE FLEETS
- 1009 FLORIDA KEYS DIVING AND ACCOMMODATIONS
- 1010 DIVE: FLORIDA
- 1011 DIVE: THE BAHAMAS
- 1012 DIVE: THE GREAT LAKES
- 1013 DIVE EQUIPMENT MAINTENANCE
- 1014 DIVE PHYSIOLOGY AND FIRST AID
- 1015 CORAL REEF ECOLOGY
- 1016 THE COMPLETE DIVER SERIES I

GIVE YOUR FAVORITE DIVE ENTHUSIAST

A great, inexpensive holiday present for convenient year round enjoyment. Order now for January 1988. You will receive a holiday card announcing your gift by December 15, 1987.

CIRCLE YOUR CHOICE:
THE COMPLETE DIVER AUDIO SEMINAR
SERIES I AT \$114.11

At a 15% discount or individual cassettes at only \$8.95 each. Postage included.

NAME _____
ADDRESS _____
CITY _____ ST _____ ZIP _____
PHONE (____) _____
OF GIFT CARDS YOU DESIRE _____

MAKE CHECK OR MONEY ORDER PAYABLE TO:
RENAISSANCE SERVICE, INC.
618 N.W. 47TH AVE • DEERFIELD, FL 33442
305/997-8523
**FOR MORE INFORMATION CONTACT THE ABOVE
ADDRESS OR PHONE NUMBER.**



The strobe's strap closes with Velcro and is fully adjustable to allow the light to be securely attached to an anchorline, boat mast, tree or a divemaster's upper arm.

exit point on a night dive you also need some sort of beacon. And, if you're trying to stay with your divemaster during a night dive when several groups are simultaneously on the reef, his/her wearing a distinguishing light would help. The ideal beacon for such situations would be a small, bright, flashing strobe that is also submersible, rugged and has a long burn time per battery charge. Dacor offers one—the DF3 Xenon Strobe Light.

Only five inches long and about one and one-half inches in diameter at the widest point, the DF3 weighs just 5.1 ounces. It has a slightly negative buoyancy underwater. The case is orange and black plastic and the lens clear plastic. The lens screws into the case, sealing with two separate O-rings. The strobe is depth rated to 450 feet.

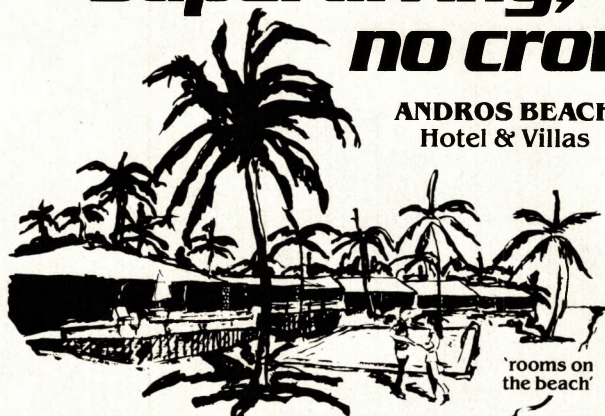
The xenon tube flash element produces an extremely bright light. Powered by a single alkaline C-cell, it will flash at one second intervals for about 28 hours. (At low battery energy levels the strobe will flash only seven times per minute.) This flashing is accompanied by a whirring/clicking sound. At close range, this should warn you if the strobe has accidentally been turned on in a gear bag or BC pocket. However, this is unlikely. The strobe's magnetic switch (at the bottom) requires more than a casual bump to rotate into either the on or off position.

The DF3 comes with an adjustable, Velcro closing strap that allows it to be securely attached to just about anything, including a divemaster's upper arm, a tree, an anchorline or a boat mast.

The DF3 Xenon Strobe Light is available at your Dacor dealer and retails for \$34.95. For the location of your nearest dealer, contact Dacor Corporation, 161 Northfield road, Northfield, IL 60093; (312) 446-9555.

The DF3 Strobe—flashy, flashy, flashy.

BAHAMAS 'In Andros, you'll get Superdiving, -and no crowds'



ANDROS BEACH
Hotel & Villas

**3 DAYS
2 NIGHTS**
as low as
\$395
(p.p. dbl. occ.)

**8 DAYS
7 NIGHTS**
as low as
\$865
(p.p. dbl. occ.)

140 miles of unexplored barrier reef – and not another dive boat in sight. Coral gardens, drop-offs, huge shipwrecks, exotic blue-holes. 15 deluxe air-conditioned rooms, full-service restaurant and bar overlooking a fresh-water pool. Two custom-dive boats. The perfect alternative to the 'follow the mob' syndrome.

3 DIVES PER DAY
(2 on arr. & dep. days)
INCLUDES: R/T Airfare
• Ground Transfers • A/C
Room • 3 Meals Daily
• Room Taxes and Tips.

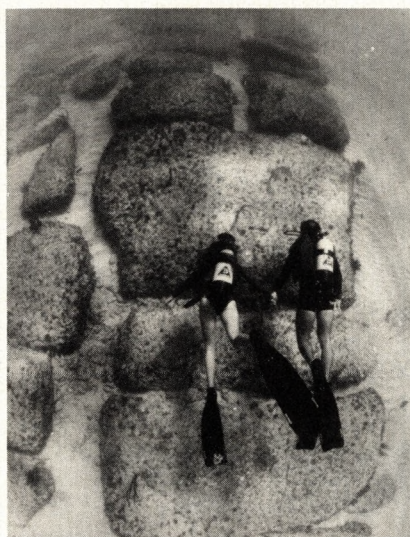
**ANDROS
UNDERSEA
ADVENTURES**
P. O. Box 21766
Ft. Lauderdale
FL 33335

Call or write for details!

TOLL FREE
800-327-8150
(305) 763-2188
FLORIDA



circle #179 on Reader Service Card



BIMINI BILL & NOWDLA KEEFE'S UNDERSEA ADVENTURES

Come visit the Wreck of the Sapona, Victory Cays, The Atlantis Road, Hemingway's Haunts, Dive Poster Reef, drift the Gulfstream along the Bimini Wall, etc., etc. (and one warm friendly dive operation).



3 days, 2 nights
p.p. dbl. (7 dives)
economy \$325
deluxe \$399

8 days, 7 nights
p.p. dbl.
economy \$725
deluxe \$975

All-inclusive packages with round-trip airfare.
Write or call for details.

Bimini Undersea Adventures
P.O. Box 21766
Ft. Lauderdale, FL 33335

TOLL FREE
800-327-8150
305-763-2188
FLORIDA



Affiliate member



circle #180 on Reader Service Card

"FALL" INTO PARADISE



COZUMEL'S HOTTEST NEW DIVE RESORT

CASA DEL MAR



Sept. 7-Dec. 20, 1987
6 Days/5 Nights

\$256⁰⁰
P.P.
Del. Occ.

• 4 two tank dives with complimentary refreshments • One night dive • Unlimited shore diving • 15% Mexican tax included • Captain, Mate and Divemaster on all boats • Tanks, Weights, and Belts on all dives • (Special Air Fares can be arranged)

CASA DEL MAR—YOUR NEW HOME BY THE SEA

Owned and operated by Hotel La Ceiba

- 116 A/C Rooms
- Pool
- Hot Tub
- Restaurants
- Super fast custom built dive boats
- Full service dive shop
- Individual attention

Call: Linda Fountain 1-800-621-6830

In Texas

214-669-1991

Casa del Mar
POB 129
Cozumel
Mexico



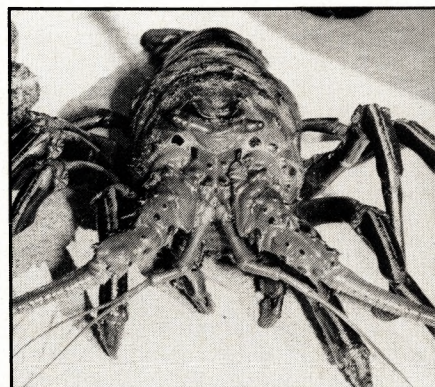
WENOKA LOBSTER GLOVE

Bugs Beware

TEXT AND PHOTOGRAPHY
BY BONNIE J. CARDONE

The spiny lobster is found in many oceans. There is *Panulirus argus*, *Panulirus versicolor*, *Panulirus guttatus* and *Panulirus interruptus*, to name a few. Since all *Panulirus* lack claws, their primary means of defense is spines, found all over their bodies, from the tips of the antennae to the edges of the tails. These spines can make mincemeat out of divers' hands. Those who are serious about bagging bugs need gloves.

Not just any glove will do, however. Veteran lobster divers generally eschew



The Wenoka glove was designed for grabbers of spiny lobster. The fingertips, thumbtip and the palm are reinforced.

neoprene because the spines penetrate this material easily, damaging both gloves and hands. Although some divers favor leather work gloves, these are hard to find in smaller sizes and get progressively stiffer with exposure to saltwater.

Until recently there were no gloves designed just for lobstering. Wenoka has corrected this omission. According to Herb van de Pol, the company's Lobster Gloves "offer great hand protection without loss of feeling." The basic material is a double thick cotton knit with a triple coating of PVC. This produces a flexible hand covering that doesn't restrict movement. Since the fingertips of a dive glove tend to wear out before the rest of it,


those on the Lobster Glove are reinforced, as is the tip of the thumb. The palm is also reinforced, with the extra material wrapping around the base of the forefinger, a part of the glove that has frequent contact with bug spines.

While neoprene gloves are hard to put on and take off, they fit snugly, allowing little water exchange—thus keeping the hands warmer—and keeping out sand. Leather gloves are easier to put on and take off, but the cuffs are usually loose, allowing both water and sand inside. The Wenoka Lobster Glove has two elastic bands at the cuff, making it easy to put on and take off as well as lessening water exchange and keeping sand out.

The Wenoka glove is easy on the



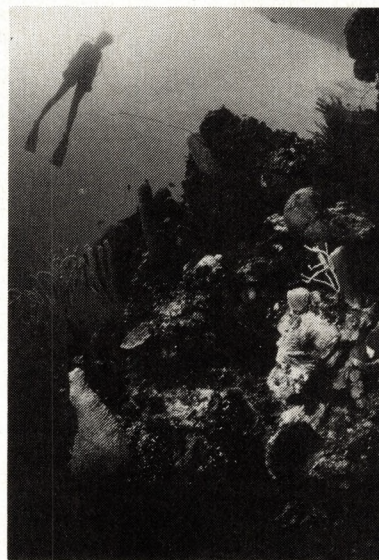
budget, too. While neoprene gloves retail for up to \$30, it sells for just \$9.90. It comes in five sizes, from XS to XL.

Wenoka claims its new glove is "Dreaded by lobsters on all coasts!" We can't vouch for that. We had to test our pair in July and all of the bugs we encountered were fearless—Southern California bug season opens in October and those crafty crustaceans know it. I could swear the ones I saw carried rolled up copies of fish and game laws under one leg. I would venture a guess, however, that once the season is in full swing and Lobster Gloves are in widespread use, the name Wenoka will strike fear in the hearts of all *Panulirus*. 

The Best of the Bahamas...

STUART COVE'S NASSAU UNDERSEA ADVENTURES LTD.

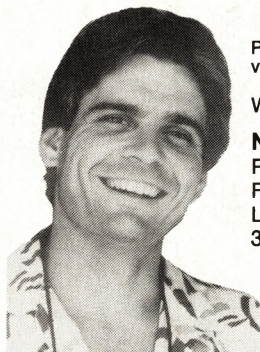
Gateway to the exciting James Bond movie sites and the drop-offs to the tongue of the ocean. Combine the ease of flying to Nassau and all of the topside attractions of the Bahamas with truly spectacular wilderness diving.



Packages are available with a variety of hotels and villas in the countryside or downtown suburbs.

Write or call today!

Nassau Undersea Adventures
P.O. Box 21766
Ft. Lauderdale, FL 33335
Local phone in Nassau
326-4171



circle #182 on Reader Service Card



TOLL FREE
800-327-8150
305 763-2188
FLORIDA.

BAHAMAS

3 DAYS	8 DAYS
2 NIGHTS	7 NIGHTS
as low as	as low as
\$399	\$975
(p.p. dbl. occ.)	(p.p. dbl. occ.)

3 DIVES PER DAY
(2 on arr. & dep. days)

INCLUDES: R/T Airfare
• Ground Transfers • A/C
Room • Breakfast
and Dinner Daily
• Room Taxes and Tips.



"FISH BOWL" OF THE BAHAMAS

Cascading corals plummet into an incredible yawning abyss – the 6,000 ft. deep "Tongue of the Ocean." Miles of spectacular wall diving where reef fish mix with blue-water species for unsurpassed diving thrills. Come stay with us on our own special island. Self-contained, friendly, unique. E-6 Photo Lab on Premises.

Call or write for details.



**CHUB CAY
UNDERSEA
ADVENTURES**
P. O. Box 21766
Ft. Lauderdale
FL 33335

TOLL FREE
800-327-8150
(305) 763-2188
FLORIDA

circle #183 on Reader Service Card

Dive, Snorkel Key Largo's Pennnekamp Park

Diver's World Sheraton Key Largo's Luxury Dive Resort

PADI, NAUI, SSI certification in five days
U/W Video School
U/W Video Rentals + Sales
Full Service Dive Shop

- Pools • Restaurants • Windsurfers
- Beach • Gift Shops • Motor Boats
- Jacuzzi • Nature Trail • Dive Shop
- Tennis • Sail Boats • Instruction
- Children's Program

Dive Package

\$79⁹⁵ pp/dbl. per day 2 day min.

Includes:

- Accommodations
- Boat Trips
- Tanks
- Wt. Belt
- Weights

Reef Trips Daily
9:00 am + 1:00 pm
Nite Dives

Capt. Corky's Divers' World of Key Largo, Inc.
P.O. Box 1663, M.M. 99.5, Key Largo, FL 33037

CAPTAIN CORKY'S DIVERS' WORLD KEY LARGO, FLA.

circle #184 on Reader Service Card

HAWAII

EXPERIENCE OAHU'S WINDWARD COAST
AWAY FROM IT ALL! CLOSE TO
EVERYTHING!

\$399⁰⁰
Per Person
Double Occupancy

Includes:
• 6 nights dlx. oceanfront hotel
• 7-days a/c car w/unltd. mileage
• continental breakfast daily
• 3 two tank dives

WINDWARD MARINE RESORT
808/239-5711

AARON'S DIVE SHOP
808/262-2333

FOR RESERVATIONS OR BROCHURE CALL
USA 1-800-367-8047 EXT. 239
CANADA 1-800-423-8733 EXT. 239

circle #185 on Reader Service Card

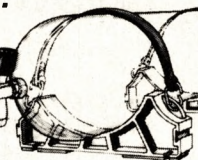
Tanks Stay Put...

TANK ESCORT

Stops your tank from rolling in your car, truck, van or boat.

Order yours today and protect your tanks and other equipment.

- Sold in pairs with your choice of heavy rubber strap or two part velcro® strap.
- Made of indestructible polypropylene.
- Dovetail interlock for multi-tank tie/down (2 or more pairs required)



\$19.95 Per Pair

Plus \$2 shipping/handling
To order send check or money order, with name and address to:

QUARRY PRODUCTS

P.O. Box 377

Fitzwilliam, NH 03447

Tel. 1-603-585-9026

Master/VISA Cards Accepted

Shipped next working day

TANK ESCORT

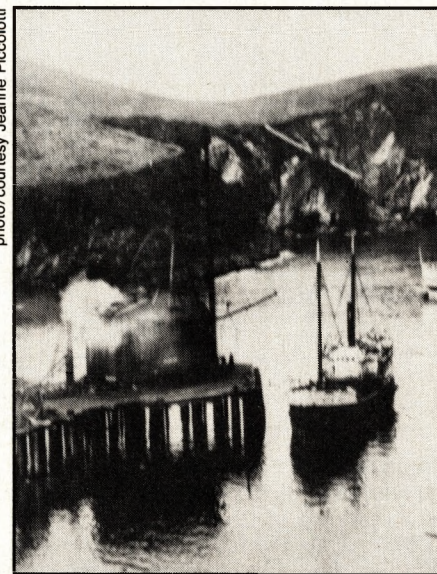
SEARCH FOR DOG HOLE SCHOONERS

BY E.R. CROSS

In the first installment of this article (SDM September '87), E.R. Cross related the history of these old sailing vessels. In this segment, he lists dog hole schooner ports, describes some of the wreck sites and tells where additional information can be obtained.

MOORING

Getting the dog hole schooner into the mooring for handling cargo was part good seamanship, part specialized skills



The steam schooner *Pasadena* at Albion. Handley's loading chute is in background.

of the dedicated crews and sheer nerve on the part of everyone concerned. There was little, if any, shelter from the wind and seas. The fact that dog hole vessels could enter and lay to in the small, open, wave washed ports at all was owing to the ability of the master of the vessel and tenacity of the crew in properly rigging anchored buoys, running lines and working the vessel into the mooring.

photo/courtesy Jeanne Piccolotti

In making a port, the vessel would stand in as close as appeared safe while still under sail. She would then anchor, or tie up to a buoy, drop all sails and secure temporarily. Part of the vessel's crew would then lower the work boat and proceed into the actual dog hole mooring. Enroute, they would take soundings and mark a channel that was clear of rocks. In most ports the owner of the loading system would have already installed heavy mooring buoys with large chains and anchors placed to hold the vessel in position under the chute or wire. Heavy iron chains or dead-eyes were firmly sunk into rocks above water at locations where the schooner's lines could be run for additional security. Also found at some of the dog hole ports were heavy timbers sunk deeply into the ground near the mooring that were used as bollards for tying up the vessels. The small boat would then lead long mooring lines from the schooner to the mooring buoys or bollards, after which the vessel would be pulled into position in the mooring. Hatches would be opened, cargo off-loaded and, when the vessel was ready, outgoing cargo would be loaded via the chute or by the wire. The entire operation, offloading and loading, might take from four to five days or as long as two weeks, always with a threat of disaster from storms and breakers in the mooring.

When the shipping season was over, the owner of the loading facility would remove buoys and anchors and await the coming of spring and a new season of loading weather.

HOW TO SEARCH FOR DOG HOLE WRECKS

From 1865 through 1884, more than 800 additional vessels were built, launched and put into the coastal trade. The ships of this era were mainly powered by sail, but more than 200 were steam vessels. All were engaged in coastal shipping into and out of the dog hole ports. At least 200 of these vessels, mostly those driven by sail, were lost when they piled up on offshore reefs or sheer rocky shores. The bones of both ships and seamen were scattered across the ocean bottom when vessels tried to pass through the tumbling breakers of the bars at the entrances to river or harbor ports. Some of the artifacts from all of these wrecks still lie scattered in the area the vessels were lost. These are mostly in shallow water.

Vessels were generally lost as a result of stormy weather and usually while in one of the dog hole ports. A first step in determining where the bones of the vessels are is to relate the anchorages and moorings to the weather patterns.

The California coastline does not run north and south. Rather, it follows nearly a northwesterly-southeasterly pattern, particularly so in the area of most of the dog hole ports. The prevailing strong winds during the shipping season (the



surfside watersports Ltd.

Split Island Spectacular on Grand Cayman

more than just a diving vacation...

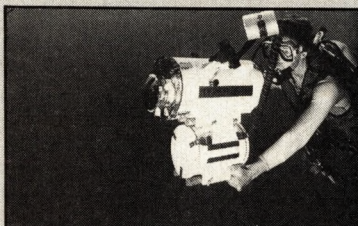
Ask about Hotel Packages available. Complete U/W video and watersports services.



SEVEN MILE BEACH
Christopher Columbus accommodations. 4 two tank a.m. dives on the walls, reefs and wrecks of the West Side.



YOUR OWN 4 DOOR CAR FOR ONE WEEK—Explore the island. • Discover great shore dives with our unlimited shore diving bonus • Freedom to discover all of Cayman's attractions.



DRIVE YOURSELF TO THE FABLED NORTH WALL—Luxurious Retreat condominiums at Rum Point for 3 nights. 2 two tank a.m. dives to discover some of Cayman's most exciting and virgin sites.

Surside's USA Sales Office
1838-40 North Main Avenue
Scranton, PA 18508

Call us TOLL FREE:

1-800-468-1708
in PA 1-717-346-6382

circle #186 on Reader Service Card

NOTICE TO SUBSCRIBERS:

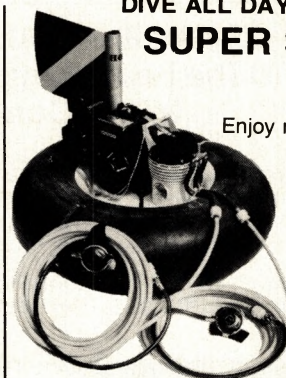
From time to time, we permit reputable companies to send announcements of their products or services to our subscribers in the mail. Requests for this privilege are examined with great care, to be sure they will be of interest to our readers.

If you prefer not to receive such mailings, and want your name in our files only for mailing the magazine to your home, please write us, enclosing a current address mailing label. Please address your request to:

PETERSEN PUBLISHING CO.

Attn: Charlotte McCoy, 6725 Sunset Bl.,
Los Angeles, CA 90028

DIVE ALL DAY WITH SUPER SNORKEL



Enjoy real diving freedom with an unlimited air supply! It's compact and lightweight. You can take it to your favorite dive spots.

See your dealer or:

INNOVATIVE DESIGNS INC.
3785 Alternate 19 North, Palm Harbor, FL 34683
(813) 934-4619

WALL TO WALL EXCELLENCE.



From the Virgin Islands' most colorful coral walls to the richly defined arches of a classically inspired hideaway, Caribbean Sea Adventures and The Buccaneer Hotel offer a most exciting combination.

If your idea of the perfect diving vacation includes sun drenched beaches, superb dining, luxurious accommodations, golf, tennis, and all the watersports you can imagine, experience our wall to wall excellence. For complete information

on our vacation packages see your travel agent or contact **RALPH LOCKE**, P.O. Box #800, Waccabuc, N.Y. 10597. Phone toll free with the number below.

EVERYTHING YOU'VE COME TO EXPECT



1-800-223-1108

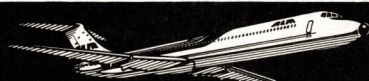
TOLL FREE NATIONWIDE

circle #187 on Reader Service Card

ALM Antillean Airlines Takes You To The Best Diving and Snorkeling in The Caribbean . . .

Curacao and Bonaire, two great destinations for avid divers and snorkelers, are served by ALM every day of the week from both Miami and New York. Convenient connections and special airfares available from most areas in the U.S. See your travel agent or dive shop for package and flight information.

To receive brochure, "ALM Takes You Diving In The Netherlands Antilles," circle reader service card or write to Dive Brochure, P.O. Box 10338, Riviera Beach, FL 33404-1338.



ALM
ANTILLEAN AIRLINES

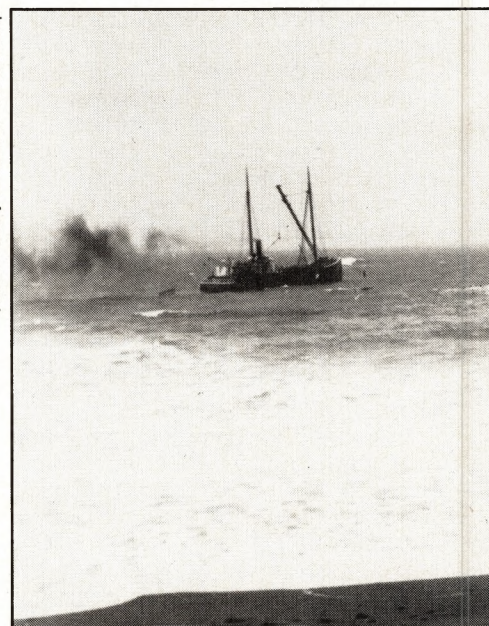
circle #188 on Reader Service Card

DOG HOLE SCHOONERS

summer months) are related to a more or less permanent seasonal high pressure system off the coast that causes them to blow from the northwest or even slightly north of that. As a result of the coastal and wind patterns, any point of land extending seaward, or an indentation in the coast, offers some protection from these prevailing northwesterlies. Even this small amount of protection enabled the dog holers to enter and work cargo as long as they were moored close to the northern shore of the port. Almost always, the remains of chutes, slides and piers will be found on the northern shore of these small ports.

During the winter months low pressure systems approach the California coast and the wind pattern changes. The wind then blows from the west through south-

photo/courtesy Swanlund's Camera Shop



Loading a steam schooner "under the wire." Note the wire running from the

west, south and sometimes from the southeast. When the wind shifted to any direction from west through southeast, vessels were exposed to both strong winds and heavy seas and found themselves close to the rocks on a dangerous lee shore. It was during such weather that many of the dog holers were lost; simply driven onto the rocks. Any search for dog hole artifacts should at least start in the northern part of these small ports.

Vessels caught in a storm sometimes broke their anchor cables or dragged their anchors, until they grounded on rocky reefs or capsized as they went through the breakers. A study of charts of the areas of the dog hole ports will reveal the pattern of shoals on which a schooner would ground when breaking out of an anchorage. A search for artifacts should

be started on the inshore or downwind side of those rocks or shoals. The number of vessels wrecked in each of the dog hole ports will be indicated in the description of each of the ports.

In the table, the dog hole ports will be arranged with # 1 being the closest to San Francisco (Duncan's Landing). The miles column refers to the approximate miles from the Golden Gate bridge. The latitude column indicates, very closely, the anchor site of the numbered dog-hole port. No longitude is given since each port will be on the coastline. When a port was known by more than one name, the aliases are listed but are referred to the common name of the port. Other data are provided for each port when available.

In addition to the dog hole ports there were three other harbors the schooners called at. All of these were large enough and had water deep enough for the schooners to enter the ports and load and unload cargo at piers. These ports were the harbor near the mouth of Smith



winch on shore to rigging on the vessel and then down and out to an anchor.

River, at Crescent City and near the mouth of the Klamath River. Six schooners were lost in the harbor at Crescent City; three at or near the piers at Klamath and one at Smith River piers.

Owing to the nature of harbors, and dredging operations conducted over the years to maintain depths in the harbors, it is unlikely any artifacts of the dog holers will still be found. Humboldt Bay, at Eureka, is also in this category.

DIVING THE DOG HOLERS

That there were a large number of wrecks in the dog hole ports is indicative of the potential marine hazards. There are almost always currents running and at least some ocean swells to contend with. Most sites are rocky with lots of kelp. It is strongly urged that divers do

"KEY LARGO'S LUXURY DIVE RESORT"

SKIN DIVER MAGAZINE

- Pro Dive Shop/
Rentals/Air
- PADI Scuba In-
struction/Specialty
courses/Nite dives
- Stephen Frink U/W
Photographic Ser-
vice Overnight
Processing/Video

- Doc's Galley Res-
taurant Water-
front Dining
- Full service marina,
boat rentals, fishing
& sailing charters

**FEATURING DELUXE
ACCOMMODATIONS
IN WATERFRONT
ROOMS AND SUITES**

- Custom diving and
watersports pkgs.
- Oversize pool,
whirlpool, health
club, tennis
- Coconuts-waterfront
cocktail lounge
with live enter-
tainment nightly

FREE DAY OF DIVING & LODGING

Pay for 4 days—get 5th day free



**MARINA DEL MAR
Resort and Marina**

**1-800-451-1113
In Fla. (305) 451-1113
522 Caribbean Drive
Key Largo, FL 33037**

**1-800-451-3483
In Fla. 1-800-253-3483
Canada 1-800-638-3483
P.O. Box 1050
Key Largo, FL 33037**

BUCCANEER'S INN-CAYMAN BRAC

• Unlimited Day and Night Shore Dives Off Buccaneer's Inn • Morning Two-Tank Boat Dives • Afternoon Unlimited Shore Dives • Little Cayman Dive Trips • Clean, Comfortable, Air-Conditioned Rooms With Private Bath • Seaside Thatch Roof Bar, Dances, Saltwater Swimming Pool, Gift Shop, Bicycle, Moped and Car Rentals, Guest Laundry • Friendly, Personal Service • Dive with Winston McDermot, Brac Aquatics.

US \$201⁰⁰ per person 4 days/3 nights.

**BUCCANEER'S INN, P.O. Box 68, Cayman Brac,
Cayman Islands, British West Indies
Phone 1-809-948-7257 or 1-800-535-9968**

ASK
ABOUT OUR
SEPTEMBER SPECIAL

RIDING ROCK INN

San Salvador, Bahamas



**DIVE OUR
RENOWNED
WALLS,
GROTTO
AND REEFS**

8 DAY 7 NIGHT PACKAGE INCLUDES:

- ACCOMMODATIONS • 3 MEALS DAILY •
- 3 BOAT DIVES PER DAY • UNLIMITED USE OF
- TENNIS COURTS • HOTEL TAXES AND
- GRATUITIES • AIRPORT TRANSFERS •
- SPECIAL CHARTER FLIGHTS AVAILABLE EVERY SATURDAY FROM FT. LAUDERDALE**

701 S.W. 48th Street, Ft. Lauderdale, Florida 33315

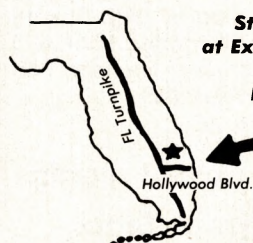
1-800-272-1492

Florida and Canada Call

1-305-761-1492

circle #190 on Reader Service Card

Largest inventory in USA!



**Stop off the turnpike
at Exit 8. Just 2 blocks east
of the turnpike.
Easy off - Easy on!**

**DIVERS
Unlimited**

6023 Hollywood Blvd. • Hollywood, FL 33024 • (305) 981-0156

Professional
Aluminum 80 K

\$89.95

Similar Values on
Wide Range
of Equipment
No mail order



circle #191 on Reader Service Card

DOG HOLE SCHOONERS

not consider working potential wreck scenes from shore. Also, working with local divers is suggested, at least for the beginning of underwater exploration, for both safety and as a guide to at least some of the wrecks. The first visit to an area (wreck site) should probably be a survey from shore. Locate the remains of the loading area or areas, then plan dives to explore places that appear significant.

Divers must remember some of these loading sites were constructed more than 100 years ago; a few nearly 150 years ago. They have not been used or maintained for perhaps 50 years. In some locales no sign of a structure remains. At some sites only the heaviest timbers can be found, or the heavy steel and iron parts of the loading system, such as large chains, anchors and the bollards driven into rocks or the rocky shore.

OTHER WRECKS

There are a few wrecks other than dog holers that divers may find of interest. Some are old and may have already been researched to death. Others lie half buried in sand dunes and are only suitable for the lens of a diver's camera.

The wreck that led to a knowledge of the California redwood coast was the 200 ton *Frolic*, bound for San Francisco. She went aground in one of the several small, shallow coves just north of where Point Cabrillo lighthouse now stands. One report said the wreck occurred, "four miles north of Mendocino at Point Cabrillo," and that it went, "on a reef at the entrance to a small cove near the lighthouse." Four miles from the port of Mendocino is Caspar Anchorage. One-half mile from the light is another smaller bay in which the vessel may have stranded.

This wreck site has been worked periodically by divers for several years. Along with artifacts from dog hole schooners, some material from this wreck was on display at the Kelley House Museum in Mendocino. These items included pottery, cast iron ballast, pulley blocks from rigging made of the very dense and heavy wood lignum vitae (it's so heavy it won't float), metal fittings, lacquerware, bottles, dishes and one old camphor wood trunk.

The *Frolic* is a fairly confined wreck and should be considered an archaeological site for preservation. The vessel grounded in 1851. It offers a fine opportunity to study a vessel of that era and its contents. I believe some archaeological work has been done here.

A wreck is also shown 2.5 miles south of Duncan's Landing (#1 on the list).

Another vessel is reported stranded 500 yards north of Bolinas Point. It was reported, in 1949, as "breaking up." Lit-

tle of this wreck may be left.

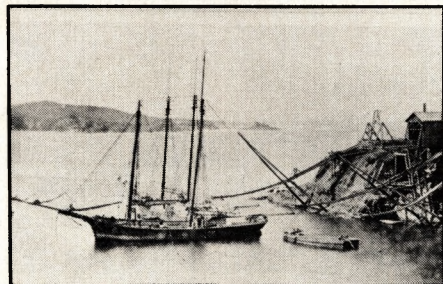
Still another wreck is shown one mile north of Point Arena lighthouse. This may be one of the older dog hole schooners, since a total of 20 have been reported lost in this area.

A wreck is also shown about three miles north of Laguna (dog hole port #47).

On the seaward side of the sand spit between Humboldt and the Pacific Ocean, a wreck is shown just opposite the village of Samoa. This is the wreck of the heavy cruiser (in those days it was a heavy cruiser) USS *Milwaukee*. The vessel is in very shallow water, mostly gone and the rest nearly buried. Some metal can be seen projecting above water at a very low tide. It's not even good photographic material.

The wreck of the *Daisy Putman* lies beached and nearly broken up about five miles north of Big Flat (which is seven miles west of Point Delgado). Some heavy timbers project out of the sand and can be photographed at low tide.

A tremendous amount of early American history was generated both above



photo/courtesy Kelley House Museum

Mendocino Landing about 1865. Note several chutes and A-frames are present.

and underwater on the northern coast of California. Divers are a lucky few who can participate in the search for and enjoyment of the maritime phase of this important era. A lot of the enjoyment is searching for and finding the remains of both vessels and loading sites in this fascinating part of California. But, the ultimate thrill comes from finding a small bit of history, either topside or during a dive, and in relating it to the people and their efforts in developing this amazing part of the country.

CHARTS

Divers who learn to use charts will certainly enhance the returns from their dive ventures. In a search for the dog holers a chart is a must. The charts I used, which were very helpful, were NOAA charts #18620—Point Arena to Trinidad Head, with very useful, large scale inserts of Rockport Landing and Shelter Cove, both dog hole ports; #18622—Humboldt Bay, a very large scale chart; #18626—Elk to Fort Bragg, with large scale inserts of the dog hole ports Elk and Cuffey's Cove; #18628—Albion to Caspar, with a large scale chart of dog hole ports #35

Casa Del Mar

COZUMEL

"Cozumel's Hottest New Dive Resort"
Skin Diver Magazine, 1987



Casa Del Mar, Cozumel's "Hottest New Dive Resort," is totally dedicated to the needs of travelling divers. Its 106 rooms, pool, hot tub and two restaurants are all located just a minute away from its oceanfront dive center, DEL MAR AQUATICS:

1. Our custom designed dive boats cut the average travel time to Cozumel's spectacular dive sites in HALF!
2. You never carry your dive gear! Store your gear in our dive lockers (complete with individual keys!) and our guides will make sure your gear is on the dive boat every day!

SPECIAL INTRODUCTORY OFFER

\$377⁰⁰

8 days 7 nights
per pers. dbl. occ.

- Includes:
- Tanks, weights and belts on all boat dives
 - 6 two-tank boat dives with complimentary refreshments

- Captain, mate and divemaster on all boat dives
- Unlimited shore diving • 15% Mexican hotel tax incl.

(Super air fares will also be arranged)



CASA DEL MAR / Two Worlds Travel

1-800-446-2166 1307 First St., Humble, TX 77338

Texas residents call (713) 466-2166 (collect for reservations only)

circle #192 on Reader Service Card

TRUK LAGOON FREE TRIP! WANT ONE?

TRIP AND TOUR

Toll Free:

1-800-348-0842 U.S.

1-800-843-8956 CA

1-800-527-5228 Canada

circle #193 on Reader Service Card

Sail and Dive the Virgins
on your chartered yacht.

UNLIMITED DIVING!
DELUXE STATEROOMS
GOURMET MEALS OPEN BAR
WINDSURF · WATERSKI
ALL GEAR PLUS COMPRESSOR

8 DAYS / PER PERSON
\$700 - \$900
PLUS AIRFARE

CALL FREE TO
VIRGIN ISLANDS

800 524-2005

VIRGIN ISLANDS SCUBA / SAIL CHARTERS
Box 10966 • St. Thomas • U.S.V.I. 00801 (809) 776-2860

ASK SOMEONE WHO'S BEEN THERE.

"The Rhone! What else is there?"

-J.E., Miami, FL

"Great diving, good service, fantastic divemasters."

-D.K., Bucks, England

"Royal treatment and excellent diving!"

-B.M., Palm Dessert, CA

"It doesn't get any better than this!"

-S.R., Austin, TX

Divers rave about Baskin In The Sun because of our diving and our people. Our guests never carry a tank or even worry about washing their own gear so they can save their energy for world-class diving! Our **Unlimited Diving** packages

include accommodations at either the in-town, all air-conditioned Treasure Isle Hotel or the self contained, waterfront Prospect Reef Resort. Call us direct and toll free at **1-800-233-7938** for information and hotel brochures.

\$499*
8 days/7 nights
*Per person, dbl occupancy



BASKIN IN THE SUN

P.O. BOX 108 ROAD TOWN

Formerly The Aquatic Centres



Tortola • British Virgin Islands 1-800-233-7938

circle #194 on Reader Service Card

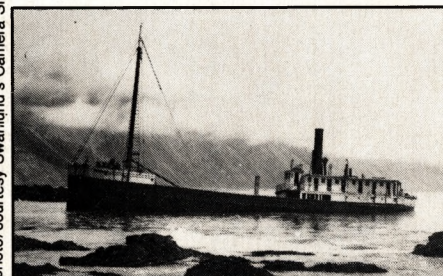
DOG HOLE SCHOONERS

through 42, including the possible site of the brig *Frolic*; and #18640—San Francisco to Point Arena.

USEFUL PUBLICATIONS

The *United States Coast Pilot, Pacific Coast*, for the years 1888, 1942 and 1968 were very useful—particularly the older edition, which listed approaches, types of landings and other data. The 1942 edition had some similar information but many of the sites had disappeared between the surveys for the two older books. The two older *Pacific Coast Pilots* are, of course, out of print. You might find a copy in a maritime museum or a library.

The charts listed above and the *Coast Pilot, Pacific Coast*, (latest edition) can usually be found in any large marina retail store. If they do not have the publications



The steam schooner *Chico* aground at Shelter Cove. The vessel was a total loss.

in stock they should be able to advise you as to a source for them.

DIVE SHOPS

The town of Fort Bragg has two dive shops. Coast Fin and Scuba is just south of town at 900 South Main Street. The mailing address is, P.O. Box 1165, Fort Bragg, CA 95437. The telephone number is (707) 964-7776. It can supply air, equipment and inflatable boats, plus most diving needs.

Sub Surface Progression is a full service dive shop a little farther south at 18600 North Highway 1, Fort Bragg CA 95437. The telephone number is (707) 964-3793. This shop is well stocked with all kinds of diving equipment, has training programs and a full line of rentals. The shop has been in operation for more than 11 years and is open seven days a week. In addition to full service sport diving, this shop also has full service commercial diving capabilities, including an excellent assortment of heavy tools for underwater construction and salvage work. It rents inflatable boats and can take charters to the *Frolic*. Look, but don't touch since this wreck is being excavated and studied as an important archaeological site.

WEST END DIVING

"BILLION GALLON LAKE RESORT"



BONNE TERRE MINE

WORLD'S ONLY UNDERGROUND DIVE RESORT

- FEATURING:
- 100' + VISIBILITY
 - 1-HR. SOUTH OF ST. LOUIS
 - YEAR ROUND 62° AIR TEMP
 - 58° WATER TEMP
 - GUIDED UNDERWATER TOURS

FOR RESERVATIONS CONTACT:

WEST END DIVING • 11215 NATURAL BRIDGE RD.
ST. LOUIS, MO. 63044 • OR CALL 314-731-5003

BECOME A DEEP EARTH DIVER!!

FILMED AND DIVED BY COUSTEAU!

Bonne Terre Mine is a leisurely one hour drive from St. Louis, located in the historic mining town of Bonne Terre, Missouri, a sleepy little mining town, with quaint restaurants and shops, as well as modern hotels. Contained in the world's largest man-made caverns is an "ILLUMINATED UNDERGROUND LAKE" with acres of COBALT BLUE WATER so still and clear it is like looking into a LIQUID WINDOW. A dive attraction that is truly a WORLD BEYOND!...A silent world of mystery and beauty which will thrill even the most experienced Diver and astound the Beginner.

Your adventure will begin at WEST END DIVING-BONNE TERRE "OLD MINE DIVE SHOPPE" where you can enjoy a cup of coffee, and pick up that last minute necessity. NEXT you will meet your Diveguide whom you will follow through the mine entrance and down the well lighted historic Mule Trail to the staging area (adjacent to the LAKE), where you will change into your diving equipment in the locker rooms for men and women. YOU WILL THEN descend the stairs to the diving platforms in the BRIGHTLY LIT "BILLION GALLON LAKE". After a dive briefing by your Diveguide and routine equipment check, you will gear up for an unforgettable dive.

RESERVATIONS (DIVING BY RESERVATION ONLY)

You must make reservations at WEST END DIVING CENTER-ST. LOUIS (314-731-5003) along with a deposit for the time and date you or your group would like to dive. WEST END DIVING-BONNE TERRE "OLD MINE DIVE SHOPPE" and "BILLION GALLON LAKE" are open on SATURDAY and SUNDAY, 9 AM to 5 PM. DIVING RESERVATIONS can be made for the following time periods:

9am thru 5pm

CALL FOR COMPLETE PACKAGE PRICES

CERTIFICATIONS ACCEPTED: NAUI, PADI, SSI, YMCA, NASDS Equipment Rentals Available.

DIVING... where tranquility is boundless and memories are forever.

circle #195 on Reader Service Card

DOG HOLE PORTS ON THE REDWOOD COAST

#49 (131 mi.) Ackman's Landing—39°35'00"—At Newport. A slide chute.

#37 (111 mi.) Albion—39°13'45"—Had lumber mill on north bank. Wharf and lighters. Four vessels wrecked.

#26 (92 mi.) Arena Cove—38°55'12"—Off town of Point Arena. Wharfs plus slide and wire chutes. In 1942 it had a wharf in fair condition.

—Beadle's Landing—See #20, Nip and Tuck.

—Beall's Landing—See #52, Westport.

#59 (155 mi.) Bear Harbor—39°55'00"—Loaded from wharf. Probably used lighters.

—Bell's Landing—See #39, Little River Landing.

#38 (112 mi.) Big Gulch—39°15'40"—Also Pullen's Landing. Slide chute. Only used three times.

—Big River Landing—See #40, Mendocino Landings.

#13 (74 mi.) Bihler's Landing—38°42'00"—Two slide chutes. One schooner wrecked there.

#17 (81 mi.) Bourne's Landing—38°46'18"—Also known as Bowen's Landing. Lumber from Gualala mill shipped from here via two slide chutes and one wire chute. Two schooners wrecked.

—Bowen's Landing—See #17, Bourne's Landing.

—Bridgeport Landing—See #28, Hoag's Landing.

#43 (121 mi.) Bromley Landing—39°23'40"—At Mitchell Creek. A slide chute. Landing never used.

—Bryne's Landing—See #20, Nip-and-Tuck Landing.

#25 (90 mi.) Buster's Landing—38°53'45"—Also called France's landing. Chute loading.

#42 (119 mi.) Caspar Landing—39°21'55"—About one mile north of Point Cabrillo. Loaded schooners via two slide chutes, later steamers via one wire chute. Has small wharf. Wrecks of six schooners.

—Cleone—See #17, Laguna.

#18 (82 mi.) Collin's Landing—38°47'25"—Also called St. Ores. Loaded via one slide and one wire chute.

—Cottaneva's Landing—See #55, Miller's Landing.

#33 (105 mi.) Cuffey's Cove—39°08'25"—0.8 mile north of Greenwood. Small landing and two slide chutes. Landing and village now abandoned.

#56 (144 mi.) De Vilbis Landing—39°25'45"—Difficult. One wire chute.

#1 (50 mi.) Duncan's Landing—38°23'50"—Six miles north of Bodega Head. Good landing in NW weather.

—Eel River Landing—See #63, Port Kenyon.

#29 (101 mi.) Elk Creek Landing—39°06'00"—Chute and landing planned—not constructed.

#64 (221 mi.) Eureka Harbor—40°45'30"—In harbor. Loaded from wharves. In Humboldt Bay.

—Fairhaven—In Humboldt Bay—Site of shipbuilding. On west side of Bay near town of Samoa.

—Ferguson's Cove—See #22, Iversen's Landing.

M/S AQUANAUT EXPLORER CRUISE • DIVE • EXPLORE



Captain Gerry Hytha—Master of the Aquanaut Explorer and Captain Erich Heindl, Vice President of Aquanaut Cruise Lines with their 35 years of diving experience all over the world will try to make your diving vacation as pleasant as possible.

The Aquanaut Explorer is 165 feet long by 38 feet wide with 6,000 square feet of deck space. All staterooms are outside, air-conditioned, and have private bathrooms. Some even have balconies.



HERE'S WHAT OUR PASSENGERS SAY:

BOB AND KATHY SACHSE—WOODDALE, FL

Being our first live-aboard trip, I am sure we will be hard pressed to find a more luxurious dive boat.

RAY AND MARTHA JORDAN—SAN ANTONIO, TX

This trip has spoiled us for other dive trips. No hauling gear on or off the ship and no long boat rides. Captain and crew were professional and entertaining.

DEBBIE SALSMAN—LAFAYETTE, LA

As a non-diver, I was extremely skeptical... but my fears were lifted immediately. The cabins were a million times better than I could ever imagine. Wonderful experience and most pleasurable week. I would recommend this dive ship to any non-diver or non-swimmer.

DIANE MUCKEY—SACRAMENTO, CA

The greatest week of my life! Diving on the wrecks was... WOW! Love the international flavor. I highly recommend being certified on a trip like this.

JIM AND SANDRA COPELAND—CORPUS CHRISTI, TX

... I've been a lot of places and done a lot of diving. This "SHIP" is in a class by itself. The crew is outstanding and the standard of excellence is very obvious. We highly recommend this operation.

Do we need to say more?

\$599⁰⁰ per person

For reservations or more information call toll free:

1-800-327-8223

in Florida 1-800-432-8894 or 305-491-0333

circle #196 on Reader Service Card



FLORIDA GOLD COAST DIVING

Explore the beautiful Florida marine life, reefs and wrecks on video before planning your dive trip. Numerous wrecks featured, including THE MERCEDES, Rebel, Mizpah, Tenneco Platforms, Owens, Rolis Royce and more. Original sound track. **Free Poster.**

\$29.95 VHS or BETA - 40 Min.
FL residents please add 5% Tax

Send check or money order plus \$2.00 shipping to:



SUBVIDEO PRODUCTIONS, INC.
P.O. BOX 3390
BOYNTON BCH., FL 33424

circle #197 on Reader Service Card

Little Cayman

The Ultimate In Caribbean Diving
Reefs, Wrecks, And The Finest
Wall Diving In The World

If You Are Going To Dive Little Cayman,
Why Not Stay On Little Cayman?

BROCHURES, RESERVATIONS,
AIRLINE RESERVATIONS - WE DO IT ALL

**Sam
McCoy's
Little Cayman
B.W.I.**

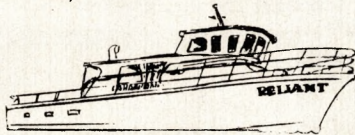
For Rates & Information
Call 1-800-843-2177
(412) 834-4064
Pa./Alaska

circle #198 on Reader Service Card

THE BEST HALF OF MAUI IS UNDERWATER WE TAKE YOU THERE IN STYLE

INTERISLAND DIVES
to Lanai or Molokini aboard the fastest, most comfortable 43' custom dive boat in Hawaii.

COMPLETE DIVE PACKAGES
One or two wk. pkgs. inc. Maui Islander hotel, rental car, and all diving **STARTING** at \$425 (per person/dbl. occ.)



**PACKAGES START
AS LOW AS:**
\$425 per person double occupancy

QUALITY ASSURANCE
Friendly, professional staff, "state of the art" equipment, Hawaii's finest diving. We are committed to giving you the most for your diving dollars.

Lahaina Divers, Inc.

710 Front St., Lahaina HI 96761 800-367-8047 ext. 102 or 808-667-7497

Name: _____

Address: _____

City: _____

State: _____

Zip: _____



MAUI

DIVERS

Call or write for more information

circle #199 on Reader Service Card



INTERNATIONAL

Remember this name when you want to become a diving Instructor.

When you need a good teaching tool, make sure you **PICK** the right **ONE**. There is one name you won't want to forget—**PDIC**. Call us today!

OCC Center—CMAS

P.O. Box 772
Scranton, PA 18501

(717) 342-1480
or 342-9434

circle #200 on Reader Service Card



Aquala
INC.

TRUE DRY SUITS
offering protection from cold and deep water dives, contamination, chemicals, etc. Easy front tunnel entry or water and gas proof shoulder zipper. Styles available for bay hunting, canoeing, surfing, yachting and custom made. Warranty.

AQUALA, INC.

P.O. Box 416 Carthage, N.C. 28327
(919) 947-3130

circle #201 on Reader Service Card

OUT STANDING OUT RAGEOUS OUT ISLAND!

BELIZE'S OFFSHORE ATOLLS

Unquestionably outstanding dive areas, dotted with Out Islands you dream of in the South Seas. Beautiful diving below... gorgeous islands above.

LET US TAKE YOU ON A DIVE ADVENTURE YOU WILL NEVER FORGET!

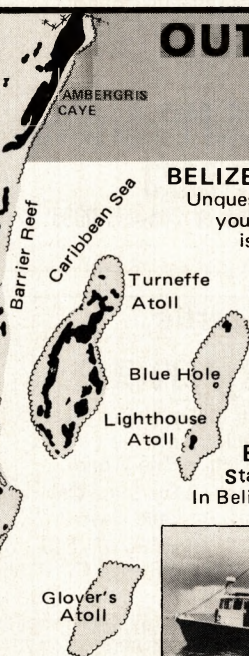
Accommodation in air-conditioned comfort at the Sun Breeze Hotel on lively **Ambergris Caye** or week-long live-aboard **Dive Safaris**. Smaller live-aboard groups love our catering and special itineraries. Individuals love our **Weekly Overnight Trips to the Blue Hole**.

VENTURE TO THE OUT ISLANDS AND EXPERIENCE THE OUTRAGEOUS!

Statelide: Ocean Connection 800-331-2458 or 713-486-6993
In Belize: Out Island Divers Ltd., P.O. Box 7, San Pedro, Belize

Overseas

011-501-026-2151



1 inch = 25 miles



The sturdy 'Reef Roamer II' can handle 16 divers.



The luxurious 'Celestial' with all the amenities.

circle #202 on Reader Service Card

DOG HOLE SCHOONERS

—**Fields landing**—See #28, Hoag's Landing.

—**Fish Rock**—See #19, Haven's Anchorage.

—**Fisherman's Cove**—See #12, Stewart's Point.

#11 (68 mi.) **Fisk Mill Cove**—38°36'02"—2.5 miles north of Salt Point. Slide chute for loading.

#46 (123 mi.) **Fort Bragg**—39°26'22"—Also called Soldiers Point. Loaded schooners at wharf. Three vessels wrecked here.

#5 (60 mi.) **Fort Ross**—38°30'36"—The landing facilities of small wharf and slide chute have been abandoned. Three schooners lost here.

—**France's Landing**—See #25, Buster's Landing.

#32 (105 mi.) **Greenwood Landing**—39°07'47"—The ruins of an incline to wharf and wire chute can be located west of Elk Post Office.

—**Gualala River**—See #15, Rutherford's Landing.

—**Hale's Grove Landing**—See also #57, Monroe Landing.

#36 (110 mi.) **Handley's Chute**—39°13'40"—On south side of Albion Bay. Loaded from slide chute.

#21 (83 mi.) **Hard Scratch Landing**—38°48'58"—Also known as Steens or Signal Point landing. Loaded by slide chute. One schooner lost here.

#54 (140 mi.) **Hardy Creek Landing**—39°42'30"—At mouth of Hardy Creek. Loaded by wire slings.

—**Hare Creek**—See #44, Pallas Bay Landing.

#19 (82 mi.) **Haven's Anchorage**—38°48'30"—Also called Fish Rock. Twelve miles southeast of Point Arena. Vessels of 200 tons can use anchorage. Slide chute facilities abandoned. Five schooners wrecked here.

—**Hearn's Landing**—See also #23, Sander's Landing.

—**Helmke's Landing**—See also #52, Westport.

#28 (100 mi.) **Hoag's Landing**—39°03'10"—See also Field's, Bridgeport and Kimball's Chute. Tramway on California's first steel suspension bridge at Bridgeport. Loaded by slide and wire chutes. One schooner lost here.

—**Humboldt Bay**—See also #64, Eureka. Nineteen vessels lost in this area.

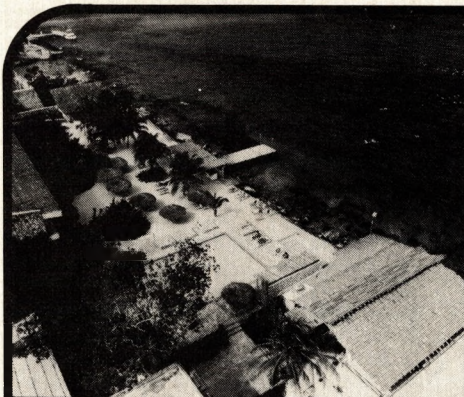
#22 (84 mi.) **Iversen's Landing**—38°49'05"—Also called Ferguson's Cove and Rough-and-Ready. First used slide chute then wire loading system. Five schooners lost here.

#2 (55 mi.) **Jenner Landing**—38°26'55"—This landing is believed to have been at the site of the present wharf at Jenner village, a few miles from the mouth of the Russian River. In the days of schooners wire chutes were used to load.

#14 (75 mi.) **Joe Tonga's Landing**—38°43'10"—This early landing used a steam driven winch and swinging boom.

#53 (139 mi.) **Juan's Creek Landing**—39°42'10"—About one mile from Hardy Creek landing. At mouth of Juan Creek. Wire chutes. Also called Union Landing.

#50 (132 mi.) **Kibesillah Landing**—39°35'30"—Small, open landing served slide chute in days of schooners.



COZUMEL'S BEST ON THE BEACH

• Five Star Caribbean Hotel • Best beach diving on the island • Pool, spa, sauna, massage room, tennis court • Telephones & television in each room • Two bars, two restaurants • English spoken throughout hotel • Divers board boats directly at La Ceiba Pier • Safe, competent dive operation • Four dive boats • Five PADI Dive-masters • American PADI Instructor • 10 Years showing divers the best Cozumel has to offer!

CONTINENTAL



**"... it never rains on me
in Cozumel, Mexico!"**

\$419⁰⁰

8 days & 7 nights
per person, dbl. occupancy

Package includes:

- 6 two tank boat dives with lunch
- unlimited shore diving at the hotel beach
- 15% Mexican Hotel tax included
- free use of tennis court (day or night)

- weights & belts with boat dives
- guide on boat dives
- for an additional charge, 7 breakfasts and dinners will be included.

(Air transportation can be arranged. Commissions to travel agents & dive industry are fully protected.)

Two Worlds Travel

1307 First St., Humble, TX 77338 **1-800-446-2166**

Texas residents call (713) 446-2166 collect for reservations only.



circle #203 on Reader Service Card



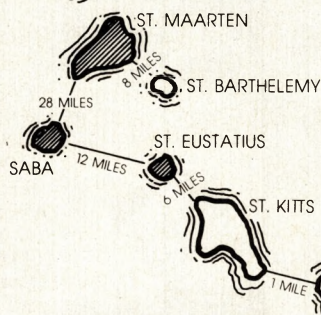
NEW FOR '87

the SURFSIDE EXPLORER



Be one of the first to enjoy:

- Luxury live-aboard diving in a truly unique and exciting area • Dive into history and explore Statia's 18th century wrecks • Explore the legendary wall pinnacles and marine life of SABA • Discover beautiful islands and people on our shore excursions • Never before such variety: ALL in one trip.



28 MILES

12 MILES

6 MILES

1 MILE

ST. EUSTATIUS

ST. KITTS

NEVIS

ANTIGUA

CARIBBEAN SEA



**For information, brochures and
reservations call or write:**

1-800-468-1708

(717) 346-6382

Surfside USA Sales Office

1838-40 N. Main Ave.

Scranton, PA 18508

1-800-348-9778

(415) 434-3400

See & Sea Travel S/C

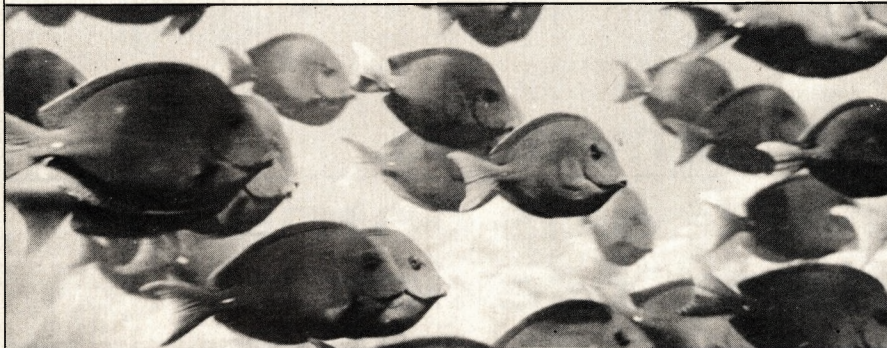
50 Francisco St., Suite 205

San Francisco, CA 94133

For much more than just a diving vacation...

circle #204 on Reader Service Card

Nice and easy. Nice and close.



Small . . . private . . . one-resort island.

Close, safe and currentless gin-clear water of the Upper Bahamas Barrier Reef. An overwhelming profusion of friendly fish and colorful corals at numerous sites and various depths.

Undiscovered. Unspoiled.

Home of Aqualife, the world's ONLY marine aquarium fish hatchery and research center.

Superb accommodations, dining, deep water marina, tennis and secluded beaches. Just 45 minutes from Ft. Lauderdale.

Close. Safe. No problems. No hassles.

Call for special dive packages.



WALKER'S Cay HOTEL AND MARINA
ABACO, BAHAMAS

(305) 522-1469, U.S. Toll Free (800) 327-3714, Fla. Toll Free (800) 432-2092

circle #205 on Reader Service Card

OPPORTUNITY!

Large live-aboard dive boats are the future of the dive vacation industry. An established, profitable, operation with excellent tax advantages is expanding. Investors wanted—working partners needed in several fields. Substantial investment required.

(713) 999-4852



Dive the blue waters of the Bahamas aboard the M/V Dream Too! 56' of air-conditioned comfort. The alternative to large crowds!

7 Day 6 Night Pkg. \$680.00

6 Day 5 Night Pkg. \$580.00

5 Day 6 Night Pkg. \$485.00

Join the "Dream Team"

305-723-9312

circle #206 on Reader Service Card

When Harry Guarantees You'll Have
a Great Time in Key Largo . . .

. . . It's a Money Back Offer!



Only Harry is willing to promise, in writing, you're gonna have a great time diving Pennkamp. His **AMERICAN Diving Headquarters** is the only one that will guarantee you'll have fun, or you don't pay!

If you're not happy, Harry's not happy! So if

you don't like the seas, visibility, or anything else about your dive day, just stay on board. You'll get a full refund as soon as you get back to the dock.

Hotel/Dive Packages available from

\$55. Per Day, Per Person, Double Occupancy

Harry Keitz's
AMERICAN Diving Headquarters

Call Us Toll Free for Charters &
Dive Package Information

US: (800) 634-8464

Florida: (800) 322-DIVE

Key Largo: 451-0037

Miami: 246-1252

P.O. Box 1250, Key Largo, FL 33037

circle #207 on Reader Service Card

DOG HOLE SCHOONERS

#47 (126 mi.) **Laguna Landing**—39°29'29"—Now called Cleone. Just north of Laguna Point. Exposed. Used in winter months. Wharf and slide chutes.

#39 (114 mi.) **Little River**—39°16'20"—Once known as Bell's Landing. Rough, dangerous port. 4.6 miles north of Navarro Head. Small wharf and two slide chutes. Five schooners lost here.

#62 (190 mi.) **Mattole Landing**—40°18'30"—A rock, eight feet high, 0.3 miles north of Mattole Point., 250 yards off the beach, supported the seaward end of a slide wharf and slide chute.

#40 (116 mi.) **Mendocino Landings**—39°18'05"—On north shore near west entrance to Mendocino Bay. A mill site was on north shore of Big River. Later moved to cliffs south of town. Lighters from mill; two chutes and two wires used from cliff for loading. Twelve schooners wrecked in this bay and at landing.

#55 (142 mi.) **Millers Landing**—39°44'10"—Also known as Cottanevas and is at Rockport. First steel suspension bridge on west coast. Used slide chute first, then wire chute. One wreck in area.

—**Mitchell Creek Landing**—See #43, Bromley Landing.

#57 (mi. 144) **Monroe Landing**—39°46'05"—Also known as Hales Grove Landing. Once used wire chute but has not been used for many years.

#6 (61 mi.) **Moss Landing**—38°31'28"—A short distance north of Ft. Ross Cove. Poor protection. Used slide chute for loading.

#34 (108 mi.) **Navarro Landing**—39°11'30"—At mouth of Navarro River. Is now abandoned. Used lighters from small wharf. Remnants of wharf still show. Five or six vessels lost here.

#60 (156 mi.) **Needle Rock**—39°56'35"—Old mill buildings, houses and remains of old landing midway up flat. Once used wire chute for loading.

#27 (99 mi.) **New Haven**—39°01'29"—Used slide chute at first, then wire loading. Two schooners lost here.

#20 (83 mi.) **Nip-and-Tuck Landing**—38°48'40"—Also called Phelps, Byrne, Peters and Beadles Landing. Used slide chute for all.

#58 (148 mi.) **Northport Landing**—39°50'05"—At Usal. Once a principal port in the area. Used wire chute. Now abandoned.

#45 (123 mi.) **Noyo Landing**—39°25'41"—Some loading at mill site—also lighters, wire chutes and slide chutes. Small but deep anchorage for vessels to 200 tons. Eight vessels wrecked in this port.

#44 (122 mi.) **Pallas Bay**—39°25'05"—Now called Hare Creek. Used slide chute for loading.

—**Peter's Landing**—See #19, Haven's Landing.

—**Phelp's Landing**—See #19, Haven's Landing.

#63 (214 mi.) **Port Kenyon**—40°38'38"—Also known as Eel River. Loading was from a small wharf.

#16 (80 mi.) **Robinson's Landing**—38°46'12"—One wire and one chute loading. In Gualala River.

—**Rockport**—See #55, Miller's Landing.

—**Rough and Ready**—See also #22, Ionsen's Landing.

#3 (54 mi.) **Rule's Landing**—

38°27'05"—Wire chute loading, across Bay. Wire chute from north shore.

#4 (54 mi.) Russian Gulch (in Sonoma County)—38°27'05"—In Russian River, near mouth. Landing up river from Rule's Landing. Slide chute. One schooner lost at this port.

#41 (117 mi.) Russian Gulch (in Mendocino County)—39°19'41"—Three piling stubs on north are all that remain of small loading pier. Two slide chutes and one wire used from the wharf. Two schooners sunk here.

#15 (79 mi.) Rutherford's Landing—38°46'10"—In Gualala River. Slide chute and wire chute. Two ships lost in this port.

#35 (110 mi.) Salmon Creek Landing—39°12'58"—This is the south entrance to Whitesboro Cove. Loaded Schooners from small wharf. Four schooners lost here.

#24 (89 mi.) Scout's Landing—38°52'50"—Originally used slide chute.

—**St. Ores**—See also #18, Collin's Landing.

#23 (85 mi.) Saunder's Landing—38°50'40"—Also known as Hearn's Landing. Used wire chute handling cargo.

#9 (65 mi.) Salt Point Cove—38°33'59"—In Gerstle's Cove. Also called Miller's Landing. Used two slide chutes. System long abandoned but remnants still there.

#61 (163 mi.) Shelter Cove—40°01'30"—The wharf was in the western part of cove but is now in ruins. Some submerged pilings still visible. Four schooners wrecked here.

—**Signal Point**—See also #21, Hard Scratch Landing.

—**Slick Rock**—See also #24, Scout's Landing.

—**Steens Landing**—See also #21, Hard Scratch Landing.

#10 (66 mi.) Still Water Cove—38°34'30"—Used slide chute for handling cargo.

#12 (71 mi.) Stewart's Point—38°39'20"—Also known as Fisherman's Cove. A small cove, no longer used except by small boats. No remains of two slide and one wire chutes were found. Five vessels lost in this port.

#51 (134 mi.) Switzer's Chute—39°37'30"—A slide chute was used to handle cargo from schooners.

#48 (130 mi.) Ten Mile River—39°33'20"—No landing. Schooner *Sacramento* wrecked here.

#7 (62 mi.) Timber Cove—38°32'10"—Two slide chutes and a wire chute in use here at different times. One schooner lost in this port.

#65 (239 mi.) Trinidad—41°03'00"—A wharf was in a small cove just east of Trinidad Head. A new wharf is approximately in the same location. Five vessels lost here.

#30 (103 mi.) Uncle Abes Landing—39°07'01"—Small slide chute used for loading.

—**Union Landing**—See also Juan Creek Landing.

#31 (102 mi.) Unknown Name—39°06'30"—This was in small dog hole one-half mile south of Uncle Abes. Remains indicate slide chute.

#8 (64 mi.) Walsh's Landing—38°33'20"—Used wire chute.

#52 (135 mi.) Westport—39°38'20"—Known as Beall's, then Helmke's. Two wharves; two slide and one wire chutes. Eight schooners lost in this port. Remnants of piers left. Across street and shoreline from Cobweb Palace Hotel.

DIVING FREEDOM

Habitat has no diving restrictions. Dive 24-hrs, day or night. Boat or beach diving. We are intimate, dive oriented & professional. No crowds, rush or anxiety. We're located right on the reef for relaxed easy access.

Varied Living Quarters—Luxurious modern villas, two bedroom cottages, economy single & double rooms.

The Personal Touch—Captain Don, founder of the diving industry on Bonaire, takes special interest in everybody and everything; talk with him anytime. He really cares!

All The Extras Gift shop, photo-lab, slide shows, lectures, restaurant & bar, dive guides, PADI 5-star training facility, unlimited free air fills, picnics, barbecues, and much more.

SPECIAL LOW OFF-SEASON RATES IN EFFECT!



**CAPTAIN DON'S
HABITAT
BONAIRE NA**

Reservations & Information:
Scott Calder International, Inc.
152 Madison Ave. New York, N.Y. 10016
(212) 535-9530, (800) 223-5581
US: Dial direct - 011-599-7-8290
Telex - 1926 HAMBO NA

circle #208 on Reader Service Card

How to buy your Caribbean island home

Your own villa or condo can put you in paradise and be a sound investment. Our impartial newsletter tells you which islands offer you the best values; covers politics, economy, quality of life, how to buy, etc. **PLUS pages of homes, land, businesses for sale.** Save on travel costs, too. Send \$2 for literature with photos and sample Report.



Island Properties Report
BOX58SR, Rte 4, Woodstock, VT 05091



DIVE ABACO!

With legendary Skeet LaChance. 150 miles of unspoiled barrier reef. Contact P.O. Box 555, Marsh Harbor, Abaco, Bahamas. 1-809-367-2014 (Bahamas). To book call Aero Int'l Tours (800) 327-0010 (National). (800) 432-5034 (Florida).

circle #209 on Reader Service Card

GO DIVING!



**CAYMAN ISLANDS
TURKS & CAICOS
ST. LUCIA
COZUMEL
BELIZE
SABA
ST. EUSTATIUS
ROATAN & GUANAJA
BONAIRE & CURACAO
GALAPAGOS ISLANDS**

Specialists in Dive Travel since 1968

Go Diving Inc. • 7630 W. 78th St. • Minneapolis MN • 55435

1-800-328-5285 In MN call (612) 942-9687

circle #210 on Reader Service Card

WORLD CLASS DIVING
IN
COZUMEL

\$ 279

DBL.OCC.

CONTINENTAL

8 DAYS & 7 NIGHTS

WITH

- .. 4 DAYS BOAT DIVING
- .. UNLIMITED BEACH DIVING
- .. BEACHFRONT HOTELS
- .. THE BEST DIVE SHOP
- .. FAST BOAT REEF TRIPS
- .. A WHOLE LOT MORE !!!!

PACKAGE PRICE VALID.
WHEN AIRFARE PURCHASED
THRU TROPICAL CONCEPTS

15 YEARS - THE COZUMEL
EXPERTS



CALL FOR DETAILS
1-800-345-7636

IN TEXAS CALL
(713) 880-1186

77007 KATY FREEWAY

HOUSTON, TEXAS 77007

circle #212 on Reader Service Card

**Chart a Course
for the BEST of
Florida Keys Diving**

You can experience the best in Florida Keys Diving at one special place—HALL'S DIVING CENTER. Climb aboard our beautiful custom 40' dive vessel LADY KEY DIVER. Chart yourself a course for over 40 miles of Keys reef and wreck diving. Explore such famous places as Sombra Reef, Looe Key Marine Sanctuary, the wreck of the "Thunderbolt"—a 188' freighter, and Pennkamp Park to name just a few. If it's important to you to dive every day—we are the only ones in the Keys who will "Guarantee" it.

Special dive pkgs. include 3, 5 or 7 nights for as low as \$38 per pers. per night.

Pkgs. incl. accom. dbl. occ., two location reef trips & air. Special rates avail. to our pkg. customers on quality rentals & lessons.



Call us toll free 1/800/331-HALL (4255)
In Florida 305/743-5929
or write 1994 Overseas Hwy.
Marathon, Florida Keys 33050



Condos & Cottages
Restaurant & Lounge
Docks Charter Vessels
Pool Tennis Beach
Sailboats

For FREE DIVE CHART or additional information contact HALL'S DIVE CENTER

**DACOR LOW PRESSURE
HOSE RETROFIT**

Dacor Corporation has information indicating a possible problem with certain low pressure hoses designed and supplied to Dacor by Sierra Precision of California. The hoses were used on Dacor regulators between December 1, 1985 and July 9, 1987. Under severe stress, they may become detached at the first stage fittings. There are no mechanical problems with the regulator itself. Only the hose is suspect.

Dacor is voluntarily requiring a mandatory retrofit of all low pressure hoses used on its regulators and sold between December 1, 1985 and August 1, 1987.

The suspected hoses have a date code that identifies their manufacturing period. This is engraved on the crimped portion of the metal fitting on the hose closest to the first stage. There is a letter on one side and a number on the other. The suspected date codes are: D5, A6, B6, C6, D6, A7 and B7.

When such a hose has been identified, the owner should bring the entire regulator to the nearest Dacor dealer. Dealers have already been informed of the situation and are ready to help exchange the hose with a revised version. If the owner is unable to identify the hose, the entire regulator should be brought to the nearest Dacor dealer for prompt examination and possible exchange. Do *not* use a suspected regulator until the hose has been changed.

In the event that a Dacor dealer is not available, the entire regulator should be sent back to Dacor Corp., 161 Northfield Road, Northfield, Illinois 60093. Dacor will then replace the hose and ship the regulator back promptly.

**SHERWOOD SOUTH
ANNIVERSARY**

Sherwood South of Norcross, Georgia, is celebrating its 10th anniversary this year. The company was founded in 1977 by Peter Skop as an authorized distributor of Sherwood, a leading manufacturer of valves and regulators for the scuba, LP gas and compressed gas industries.

Sherwood South (formerly named Selpac Southeast) started in a 5,000 square foot facility in Atlanta. The company had an administrative staff of three with two sales representatives. It has steadily grown over the years and is now in a modern, 12,000 square foot office/warehouse facility. The administrative staff currently numbers 16, with a total of eight scuba sales representatives. Later this year, the company plans to expand its

existing facility to 20,000 square feet.

The sales staff at Sherwood South is divided into two groups according to product lines. One group specializes in scuba equipment, while the other handles LP/compressed gas equipment. The scuba sales representatives are all certified divers, each having many years of experience in diving equipment and procedures. When not at work, they actively pursue their favorite hobby, diving.

Sherwood South offers the complete Sherwood equipment line, including regulators, steel and aluminum cylinders, gauges, BCs and accessories. For the convenience of its customers, Sherwood South also offers a toll free telephone number (800) 282-9677; in Georgia (800) 241-9880. ✕

TRAINING PROGRAMS FOR MULTI-PLACE CHAMBERS

Hyperbarics International is conducting monthly training programs for medical or non-medical personnel, operators and/or technicians for the treatment of saturation or non-saturation divers. This program also includes complete insight of chamber operation; oxygen, fire and chamber safety; with all the physics and physiology of life support systems, treatment gases and tables and the use of medical equipment in a hyperbaric environment.

Programs can be conducted at Hyperbarics International in Key Largo, FL or at any diving or multi-place hyperbaric medical facility for cost effectiveness.

For information contact Dick Rutkowski, Hyperbarics International, 10908 SW 112th Avenue, Miami, FL 33176; (305) 596-5184. ✕

BALI MEDICAL SYMPOSIUM

Poseidon Ventures Tours and Michael Strauss, M.D. of Memorial Medical Center, Long Beach, CA, will host the 1988 International Diving Medical Symposium. To be held in Indonesia, the trip departs February 14 from Los Angeles on Garuda Indonesia Airlines. The medical program will focus on diving medicine, underwater physiology, diver rescue and practical medical aspects of diving in Indonesia.

The floating resort will be the mini-cruiser *Island Explorer*, which features 18 air-conditioned cabins and suites, gourmet food and a host of activities besides diving. The 12 night itinerary will take guests from Bali to Ambon, cruising east past Komodo and Maumere across the Flores Sea and then out across the Banda Sea to unexplored archipelagos at the end of the world. There will be land excursions as well.

For further information contact Poseidon Ventures Tours, 359 San Miguel Dr., Newport Beach, CA 92660 or call (800) 854-9334 or (714) 644-5344 in California. Non-medical participants are welcome. ✕



COZUMEL
\$99

Dive with Cozumel's premier dive operation
CARLOS SIERRA'S DIVE COZUMEL

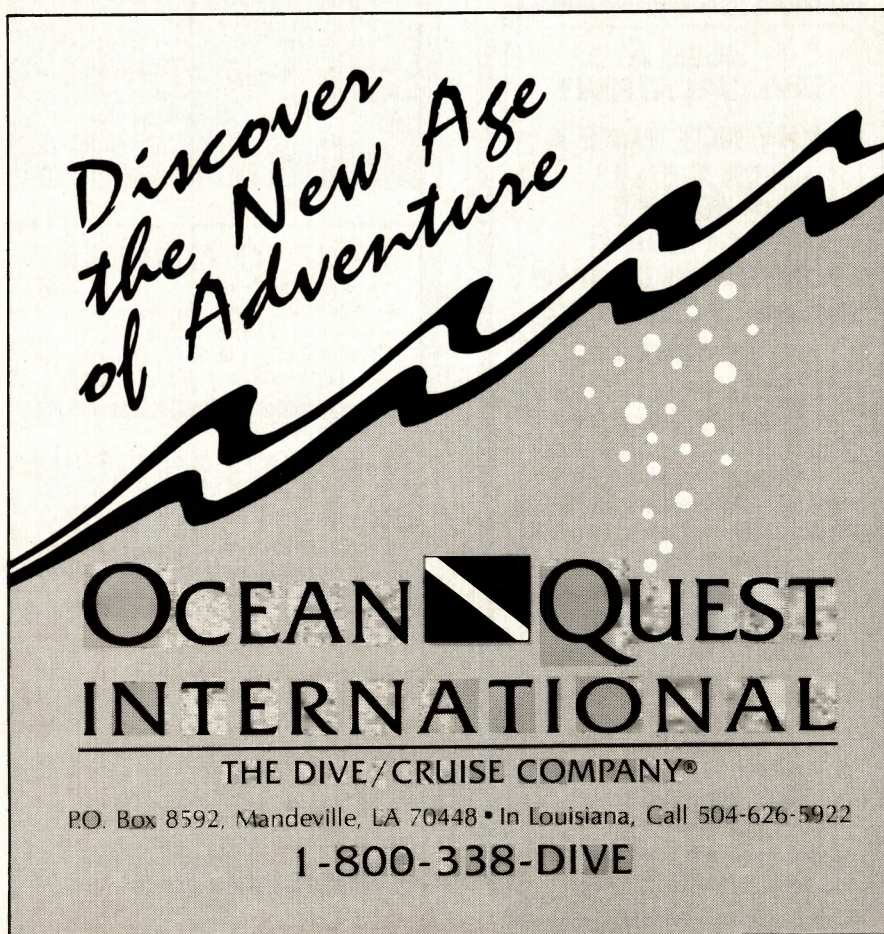
Includes three nights lodging at beachfront Diver's Inn, two days diving, unlimited beach tanks, Continental breakfast daily, lunch on diving days. All prices quoted are per person, double occupancy. Valid only with purchase of Cozumel airfare from Kenlee's Island Dreams. Many other packages available.

1-800-346-6116
In Texas call (713) 467-6622

KENLEE'S ISLAND DREAMS
5705 Glenmont, Houston, Texas 77081

aeroméxico  The National Airline of Mexico

circle #213 on Reader Service Card



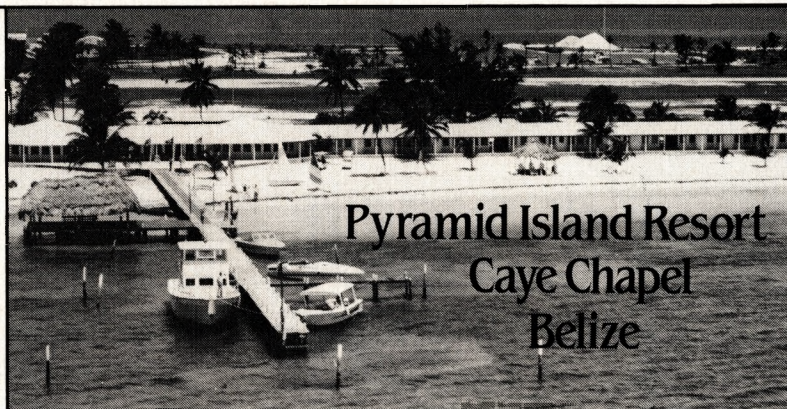
Discover
the New Age
of Adventure

OCEAN QUEST
INTERNATIONAL

THE DIVE/CRUISE COMPANY®

P.O. Box 8592, Mandeville, LA 70448 • In Louisiana, Call 504-626-5922

1-800-338-DIVE



Pyramid Island Resort Caye Chapel Belize

Escape to our private island. Just five minutes from the Caribbean's best kept secret—Belize's Barrier Reef. Land on our 3,300' airstrip or dock in our full service marina. 32 air-conditioned rooms on the beach, a bountiful bar, local and international dining. Enjoy our full watersports facilities, play tennis or volleyball, or just relax and escape.

- Group packages and overnite charters available.

- We dive the Barrier Reef, Turneffe Islands, Lighthouse Reef & the fabled Blue Hole.
- Glass bottom boat rides; exotic bird watching.
- Jungle river trips; motor bike island touring.
- Complimentary windsurfing, Sunfish sailing, and pier fishing.

Call us about low cost dive packages

Call toll free in the U.S. 1-800-325-3401

P.O. Box 1545, Ashland, Kentucky 41105

OR write us at: Pyramid Island Resort, P.O. Box 192, Belize City, Belize, C.A. Tel: 011-501-02-44409

Radio: Marine Band 68 or 2 Meter 6500

circle #214 on Reader Service Card

NEED A DIVE VACATION?

WHY NOT TAKE A

PADI® Continuing Education Course Where YOU Prefer to Dive?

We have 17 Years Experience organizing dive group tours and individual diver vacations year round.

**Bonaire • Bahamas • Caymans
Virgin Islands • Live Aboards
South Pacific**

**We Can Arrange Airfare
ALL GROUP TOURS
ACCOMPANIED BY PADI
INSTRUCTORS**

Call or Write:

"The" Dive Shop
2841 Rogers Drive
Falls Church, VA 22042
(703) 698-7220

We teach while we travel

M/C VISA AMEX

circle #215 on Reader Service Card

14 CT. SOLID GOLD SCUBA DIVER

Very Detailed. The Perfect Gift for Divers.
Designed to hang on a chain. Male or Female.



SEND \$85.00 To:
Mark J. Siegal
7166 Copperridge Dr.
Jackson, MS 39211
Call Me: 601-992-0100/day
601-856-7929/night

circle #216 on Reader Service Card

STUDIO GALLERY

Colorful pastel drawings of marine life, actually drawn underwater, on location, by the world's first underwater artist. Nick Peters, 303 Park Ave., So., Ste. 311-A, New York, NY 10010 • (212) 673-1523

circle #217 on Reader Service Card

ATTENTION SKIN DIVING CLUBS

Petersen's SKIN DIVER has a special skin diving club rate available for group orders. (Magazine will still be delivered to member's home.) Please send subscription rate details to:

Club Name _____

Your Name _____

Street _____

City _____

State _____

ZIP _____

skin diver

6725 Sunset Blvd.
Los Angeles, CA 90028
Attn: C. McCoy

CATALINA PHOTO CONTEST

The Second Annual Catalina Island Underwater Photo Competition will be held February 5-7. This year's competition will be sponsored jointly by the National Association of Underwater Instructors, Nikon and The Blue Dolphin House.

The contest weekend will begin on Friday evening with a three hour seminar on Getting Those Winning Photos, hosted by Dennis Graver.

Saturday morning each contestant will receive one roll of Ektachrome 100 ASA film, to be exposed at any site the diver can return from by 3:00 pm. Water conditions will be the same for all competitors, thus evening the odds in the competition.

Saturday evening participants can speculate as to how successful they were over cocktails and hors d'oeuvres while the film is airlifted to the mainland for overnight developing.

The moment of truth arrives at 10:00 am Sunday morning when the film is returned to the contestants. Each diver can enter up to five slides in any combination of categories (diver, macro, marine life, humorous, above water) in the novice or open divisions. While the judges are choosing winners from the entries, contestants will enjoy a champagne brunch. The awards ceremony will follow with plaques and door prizes.

The registration fee of \$78 includes champagne brunch, awards ceremony, one roll of film, developing, use of tank and weightbelt, and door prizes. Please register by January 1.

For assistance with hotel reservations, additional information and registration forms contact Nanci or Bud Davis, Blue Dolphin House, P.O. Box 2605, Avalon, California 90704; (213) 510-1811.

ROBERT E. NEWTON

Robert E. Newton of Smyrna, Georgia was killed July 13 in an automobile accident in Cozumel, Mexico. Captain Newton, owner of the Atlanta, Georgia and Houston, Texas Diver's Locker stores, was killed instantly, and his three passengers severely injured, when the Jeep in which they were riding was struck head-on by a truck.

"Cap'n Bob," as he was affectionately known, came by his namesake quite legitimately. He held an ocean operator's license and operated his Florida based *Acorn* and *Meridian Maiden* dive boats. He was also a multi-engine rated commercial pilot.

In his 34 years, Newton lived the kind of larger-than-life existence that would have provided excellent grist for an adventure novelist's wordprocessor. He was a sky diver and a competitor in or-

ganized tournaments. He first used scuba when he was only eight years old and was certified at 14.

At the age of 16, he was navigating boats from Florida to the Bahamas. Still in his youth, he was once forced to contend with a vicious storm and a passenger who tried to take control of the vessel. Bob bested the elements and his passenger's efforts, and after nearly five hours of navigation, in virtually zero-visibility, made his intended landfall.

In the air, Bob twice made successful dead-stick landings under instrument conditions when the airplanes he was piloting lost all power.

Bob Newton was a gifted scuba instructor and a man of infinite patience. He had the ability to so completely focus on a given student's problems that the subject of his attention could be forgiven for thinking that he or she was the most important person that Bob had ever taught.

Most of all, Bob Newton was a very complete human being. Despite his many, many accomplishments he never felt the need to affect the self-anointed pomposity so often displayed by lesser men of lesser abilities.

Newton is survived by his wife, Trudy, and his parents, Mr. and Mrs. Ray Newton, all of the Atlanta area. 🐸

HYCO SUBMERSIBLES

Denise Mansel has been appointed marketing coordinator of Hyco Submersibles Ltd. The Canadian company designs and produces manned and unmanned subsea vehicles including the *Gemini*, a transparent submersible for research and tourism. Hyco has been building *Pisces* class submersibles since 1964.

For more information contact Hyco Submersibles Ltd., Lions Gate Business Park, 126 Garden Avenue, North Vancouver, B.C., Canada V7P 3H2. 🐸

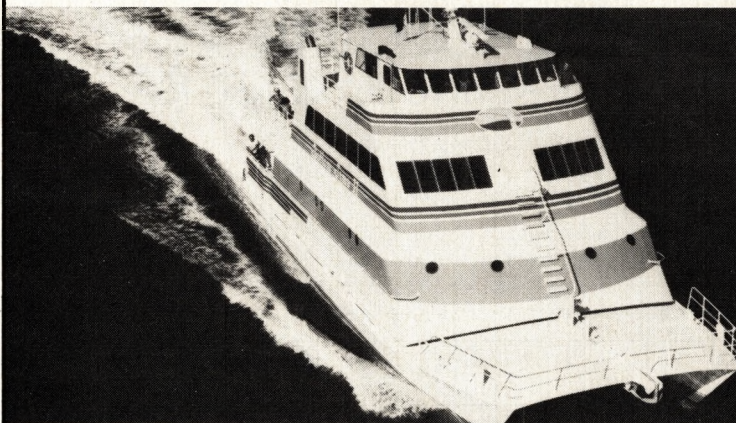
NAUI COLLEGE NEWS

For those students interested in obtaining a diving instructor certification as well as assistance with English as a second language, NAUI College, in conjunction with Chapman College in Orange, California will soon be offering an instructor training course specifically designed for ESL compatibility. More details will be announced by late fall of this year.

For the student not interested in a full-time teaching career, NAUI Accredited College offers a wide variety of instructor training courses that can fit just about anyone's schedule.

There are increasing opportunities to study with NAUI Accredited College abroad in 1987-88. For a listing of all college programs, as well as general information on the ten year old school, please contact NAUI College, 27402 Camino Capistrano, Suite 103, Laguna Niguel, California 92677; (800) 423-7095 or (800) 227-6663 (in California). 🐸

BOTTOM TIME II



SPECIAL TRIPS TO BAHAMAS & VIRGIN ISLANDS

Private 2 Person Cabins.

This new ultra-stable 86 X 30' catamaran is today's answer to the diver's dream.

Contact: **BOTTOM TIME ADVENTURES**

P.O. Box 11919, Ft. Lauderdale, FL 33339-1919

1-800-345-DIVE (Outside FL) • (305) 561-0111 (In FL)

circle #218 on Reader Service Card

DIVEBOAT
CAPTAIN'S
LICENSE
PASS THE COAST GUARD EXAM

SEA SCHOOL
TOLL FREE 1-800-BEST-ONE

We GUARANTEE
Your License

CLASSES HELD
NATIONWIDE
(237-8663)

The FABULOUS FLORIDA SPRINGS VIDEO —with your host Ned DeLoach—

• Visit on video: Ginnie Springs, Devil's Eye, Crystal River & more. Receive valuable coupons with every tape. Indicate VHS or BETA.

• **SKIN DIVER SPECIAL \$24.95**
add \$2.00 shipping & handling
Florida residents add 5% tax.
—M.O. Mailed Same Day—

Send Check or M.O., to:
Leisure Time International, Inc.
6353-4 Argyle Forest Blvd.
Jacksonville, FL 32244

circle #256 on Reader Service Card

COZUMEL

IS WAITING FOR YOU

The best bargain in diving today

- 🐠 Full Week Dive Package
- 🐠 Unlimited Diving
- 🐠 2 Meals Daily
- 🐠 Taxi Transfers
- 🐠 Mexican Hotel Tax

We specialize
in groups
Call for
best price

from
\$295⁰⁰
7 Nights
per person dbl. occ.

FOR RESERVATIONS OR INFORMATION PLEASE CALL OR WRITE:



ISV
International Scuba Ventures
DIVE TOURS

7322 SW Freeway, Suite 140
Houston, TX 77074
(713) 477-0236
Toll Free All States 800-231-9707

circle #219 on Reader Service Card

HAWAII

Oceanfront Resorts

CONDOMINIUM VACATIONS

Hawaii's best dive package value!

\$799* 8 Days/7 Nights
AIR/CONDO/DIVE/CAR PACKAGE
Kauai, Kona, or Maui

- Roundtrip Airfare from L.A., S.F. or Seattle.
- 8 Days/7 Nights Deluxe Condominium Suite.
- 7 Days Compact Car Rental with Unlimited Mileage.
- 3 Days of 2-Tank Boat Dives with the finest dive shops on the islands:

• **KAUAI** • **KONA** • **MAUI** •
Aquatics Kauai Kona Coast Divers Lahaina Divers

For reservations,
information
or free brochure

*per person, dbl. occ., Wed. travel

CALL TOLL FREE
1-800-367-5108

M-F 9:00am-5:30pm
Pacific Coast Time

**real
hawaii**

HYPERTECH^{INC.} UNDERWATER VIDEO SYSTEMS

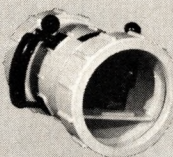


HYPER-LIGHT V
\$495

Before you buy underwater video equipment, understand the differences in quality. HYPERTECH equipment is known for its close sharp focus, reliability and the best lights money can buy.

Our lights project the widest, most even pattern of light available and we use the most reliable batteries you can buy. HYPERTECH housings are the easiest to load and give you the features you really need. We dive and test equipment more than our competitors. We build housings for most video equipment, consumer and professional.

PROFESSIONALS LIKE THE U.S. NAVY, JACK McKENNY, STEPHEN FRINK, AND MANY DIVE RESORTS USE HYPERTECH EQUIPMENT. See our demo tape before you make any decisions.



H7 HOUSING
\$459

CALL FOR BROCHURE OR DEMO TAPE: 1-800-782-4448, 305-782-4448
HYPERTECH INC., P.O. BOX 10513, POMPANO BEACH, FL 33062

circle #220 on Reader Service Card

**CAYMAN ISLANDS
BAY ISLANDS
ST. LUCIA
AKAMUL
BAHAMAS
BONAIRE
BELIZE
COZUMEL
CURACAO
TOBAGO**

**DIVE TRIPS FROM
\$199pp**

**LIVE-A-BOARD
DIVE BOATS**

**FISHING PKGS.
RELAX PKGS.
GROUP RATES**



1-800-331-2458
or 713-486-6993
16730 EL CAMINO REAL
HOUSTON, TEXAS 77062

circle #221 on Reader Service Card

DIVE BONAIRE BOAT

Peter Hughes Dive Bonaire has a new 40 foot vessel. Constructed by Michael Fitz Custom Boats, Inc. of Naples, Florida, *Star Explorer* is fiberglass with a flying bridge and twin V-8, 350 hp diesel engines. It is capable of speeds up to 30 miles per hour.

Carrying up to 20 divers, *Star Explorer* will be regularly scheduled for special all day dive trips to Washington Park, Pink Beach and the east side of Bonaire. Additionally, there will be special excursions to Klein Curacao. *Star Explorer* brings the Dive Bonaire armada up to 11 boats.

Monte Hollander is the new general manager of the Divi Flamingo Beach Hotel & Casino. Hollander has more than 15 years of extensive experience in the food and beverage and entertainment profession, as well as a solid background in ho-



tel operations. As general manager he will be responsible for the overall operation of Divi Flamingo Beach Hotel & Casino and Peter Hughes Dive Bonaire.

Peter Hughes Dive Bonaire was opened in 1977. Today, two completely equipped and professionally staffed dive shops and piers, with a fleet of 12 custom-designed dive boats, provide easy access to more than 50 dive sites. Dive Bonaire features complete dive instruction and certification courses, from resort courses for the novice to advanced certification courses for dive professionals.

Reservations and information can be obtained through recognized travel agents, dive shops or Divi Hotels Marketing, Inc. (607) 277-3484 or toll free (800) 367-3484 in the U.S. and Canada.

TEXAS TRASHFEST

On Saturday, October 3, the Texas Gulf Coast Council of Diving Clubs (TGCC) will conduct its 12th annual Trashfest. This is an ecology dive to clean out the beautiful, spring-fed Cowal River in the hill country of Texas.

In past years the TGCC has had more than 325 ecology minded divers cleaning out the river, plus ground crews and support teams. They have rid the Cowal of tons of trash.

The Chamber of Commerce of New

Braunfels will be hosting a full German sausage dinner with all the trimmings. Refreshments are furnished by the local Budweiser distributor. Dump trucks and loading equipment are supplied by the New Braunfels City Parks Department.

Any profits from this event go toward continuing the activities of the TGCC. One new and unique benefit offered to TGCC members is ACTs (Aid for Chamber Treatments). ACTs is a fund set up by the TGCC for its certified diver members to provide financial assistance (approximately 20 percent) of the cost of chamber treatment for a sport diving accident.

For information contact Gene Baugher at (713) 433-4761. 📞

MID-AMERICAN DIVING VIDEOS

The adventure of Great Lakes and mid-American diving is the subject of a soon to be released home video series, the Hydro Vision Divers Log. Produced by the Hydro Vision Group of Indiana, it will include material on shipwrecks, quarries, aquatic life and other freshwater diving resources. Apart from the main topic each log "entry" is scheduled to include a short vignette that will provide useful information on diving techniques.

"Although we will visit well known dive sites, the series is not presented in travelogue or magazine format," according to company spokesman, Tim Early. "We lean more toward detailed exploration so the diver might better understand and appreciate what is available in this area . . . The tape series is an invitation to all divers to share in the adventure of Great Lakes and Mid-American diving."

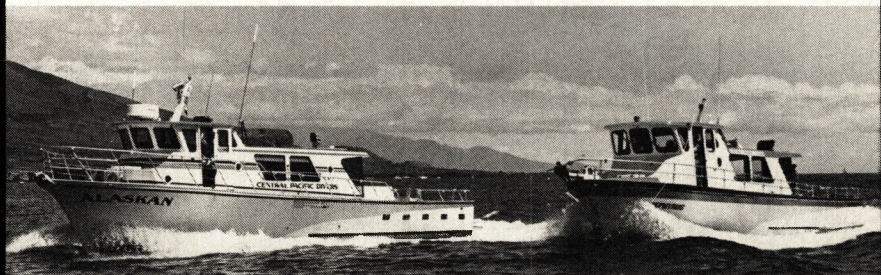
The tape series, in all home video formats, will be made available directly from Hydro Vision, P.O. Box 469, Whiting, IN 46394. 📞

SEA OF CORTEZ PHOTO SEMINARS

Baja Expeditions, Inc. of San Diego, California is offering unique underwater photo seminars in the Sea of Cortez through November 1987. Marty Snyderman leads the seminars aboard the 20 passenger M/V *Don Jose*, which is equipped with a darkroom for E-6 processing. The eight-day trips include boat accommodations; one night's hotel accommodation in La Paz; use of scuba tanks, backpacks, weightbelts; unlimited air fills; all meals, beer and sodas; professional critique of photography and access to darkroom and one to two night dives (weather/conditions permitting). Participants must bring all personal dive gear, underwater cameras and lenses.

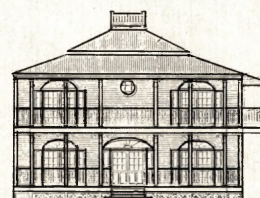
The dive sites are many and varied. The eight day itinerary is flexible and dependent on the weather and wishes of the group. For more information, call or write Baja Expeditions, 2625 Garnet Avenue, San Diego, CA 92109; (619) 581-3311 or outside California call (800) 843-6967. 📞

CENTRAL PACIFIC DIVERS MAUI ANNOUNCES "THE ULTIMATE DIVE RESORT"



- 1) **TAKE:** Maui's finest dive operator, **Central Pacific Divers**
- 2) **ADD:** Maui's newest luxury hotel, **The Plantation Inn**
- 3) **THEN ADD:** One of the state's top 10 restaurants, **Gerard's**

YOU HAVE: The ultimate dive resort from \$475 per week



The Plantation Inn

This unique package combines the 15 years experience and 43' and 50' luxury dive boats of Central Pacific Divers with the Plantation Inn, our brand new, personal, first class inn featuring turn of the century furnishings, central air, 12' deep tile pool & spa, and the award winning cuisine of Gerard's Restaurant. All this located in the historic, beautiful town of Lahaina, walking distance to the boats. Our deluxe dive week—7 boat dives, elegant accommodations, air-conditioned car, gourmet meals, champagne—\$680 per person.

For information:

Packages or accommodations 1-800-433-6815 toll free

Dives or classes 1-800-551-6767 toll free

Or contact Central Pacific Divers 808-661-8717

780 Front Street, Lahaina, HI 96761

When on Maui, come by to view our rooms or try a dive or a meal. Free intro dives in our pool through complete diver training in our PADI 5 Star facility.

circle #222 on Reader Service Card

LIFE'S A BEACH . . . AND THEN YOU DIVE!



**in the Florida Keys
AT TILDEN'S PRO DIVE SHOP AND
ECONO LODGE "WE HAVE IT ALL"**

Dive Packages from

\$129⁰⁰

pp/dbl. occ.

3 Days/2 Nights, includes accom., 6 dives, tanks & weights

Custom Dive Packages upon request • Reef Trips • Lessons • Full Service Dive Shop • Modern Rentals • Sandy Beach • Pool • A/C Rooms • Restaurant • Lounge

CLUB & GROUP RATES AVAILABLE

Tilden's Pro Dive Shop is a P.D.I.C. Instructor Training Facility. Lessons starting daily in Snorkeling up thru Instructor.

Call

In FL

1-800-223-4563 (305) 743-5422

**Tilden's Pro Dive Shop • M.M. 49 1/2
4650 Overseas Hwy., Marathon, FL 33050**

circle #223 on Reader Service Card

DIVE ST. CROIX AMERICAN VIRGIN ISLANDS

- 5 two-tank boat dives (2 Dive Boats: 42' Afternoon Delight and 93' Sea Ox)
- Unlimited beach and pier dives
- Lodging (Frederiksted Hotel)
- Airport transfers • Welcome cocktail
- Room & energy taxes

8 DAYS/7 NIGHTS
\$499
per person double occupancy

Offer available April 1 - Dec. 15, 1987



**CRUZAN
DIVERS
INC.**

12 Strand St., Frederiksted, St. Croix
U.S. Virgin Islands 00840 809-772-3701

1-800-247-8186

Dive Shops and Travel Agents:
ask for wholesale rates

circle #224 on Reader Service Card

DIVE THE BEST OF THE FLORIDA KEYS

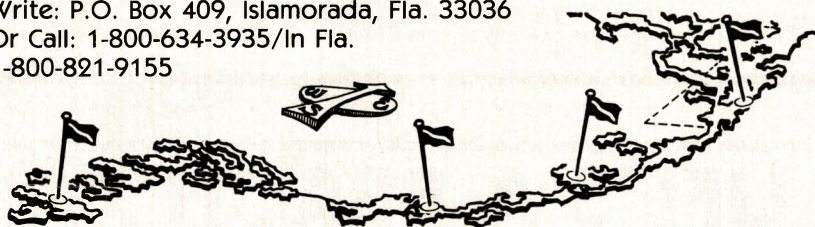
Offered by the 4 premier dive shops • Free tanks & weight belts

8 DIVES FOR \$130.00

Write: P.O. Box 409, Islamorada, Fla. 33036

Or Call: 1-800-634-3935/In Fla.

1-800-821-9155



Reef Raiders
Key West

Diving Site
Marathon

Buddy's Dive Shop
Islamorada

Atlantis Dive Ctr.
Key Largo

circle #225 on Reader Service Card

"WANNA TRY MY BROWNIE?"

With the famous **BROWNIE'S THIRD LUNG** you're free! Forget those cumbersome scuba tanks and uncomfortable harnesses. With a **BROWNIE** you'll feel like you're snorkeling without having to surface for air!

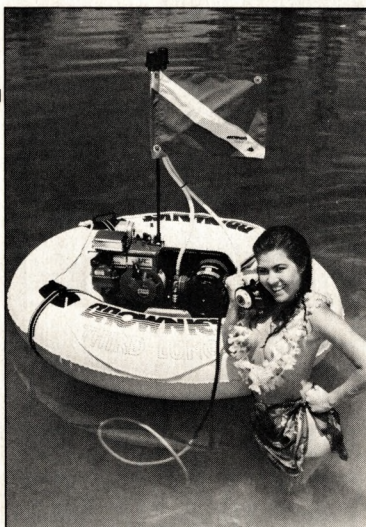
For exploring, tropical collecting, lobstering, or underwater maintenance, you can choose from any of our seven reliable floating or deck-mounted surface supplied models. And with the **BROWNIE** you and a friend will be able to attain depths of up to 90' with only safe diving practices as your limitation.

So forget having to go back for air refills and leave your heavy tanks at home. Just tell your local dealer you're ready to try out a **BROWNIE**.

For a free brochure or the name of your nearest authorized **BROWNIE'S** retailer call us toll free:

IN FLORIDA (305) 462-5570

1-800-327-0412 NAT'L



**BROWNIE'S
THIRD LUNG**

940 N.W. First Street
Fort Lauderdale, Florida 33311

PADI TRAVEL/ACTIVITIES GUIDE

PADI has introduced the Travel & Activities Guide, a new, annual magazine providing complete information and photographs on PADI resort destinations. The guide gives the traveling diver information such as the type of accommodations



to expect, the normal travel time to popular dive sites, equipment and training available and other activities at hand.

The guide is part of the new PADI Diving Society membership package and replaces Diving Ventures magazine. Joining the society and membership renewal are now accomplished by purchasing the package—registration with PADI Headquarters is no longer necessary.

Besides the Travel & Activities Guide, the diving society membership package includes coupons with \$2,600 in discounts at PADI resort destinations. The package is available at PADI training facilities and comes complete with membership card, decal and certificate. The suggested retail price is \$9.95.

FOSTER'S IMPROVEMENTS

Don Foster's Dive Grand Cayman Ltd., based at the Royal Palms Hotel, has several new features and services.

Ocean Photo Centre now has Capsule 8 video housings and Sony Handycam units available for rental. Or, photo pro Bradley Graham can shoot videos of dive groups for souvenirs.

Foster's recently installed a new water-cooled Mako MHP-40 compressor providing increased capacity to handle the growth and expansion of the operation.

To make sure that guests never lose a day of diving, and to ensure their maximum comfort while being transported to the shop from their resort, Foster's recently replaced its mini bus shuttle with the Magic Bus, a 23 passenger custom GMC mini school bus. Guests now ride in air-conditioned comfort to and from resorts or to departure sites on the south coast or other locations if weather does not permit west coast trips.

Additional training courses are now being offered by Foster's, including scuba

DISCRIMINATING DIVERS DEMAND LA CEIBA

La Ceiba is the finest dive resort on the beach, where many of our guests return time and time again to enjoy our gracious hospitality, cuisine and lovely air-conditioned rooms.

UNLIMITED DIVE PACKAGES FROM: \$158*

CALL: Linda Fountain,
1-800-621-6830
or 214-669-1991

La Ceiba Beach Hotel,
Box 284, Cozumel, Mexico
Tel: 011-52-987-2-00-65
011-52-987-2-08-15
011-52-987-2-08-16



*Sept. 1-Dec. 15. per pers.: dbl.
occupancy
15% tax included

circle #226 on Reader Service Card

SEE THE UNDERSIDE OF HAWAII

PHOTO: ROD & KATHY CANHAM



CONTINENTAL
UP WHERE YOU BELONG

With Hawaii's Finest
Dive Operators

**DESTINATION
HAWAII**

Send \$3 for 24 page
color dive guide to:

Name _____

Address _____

City _____

State _____ Zip _____

P.O. BOX 90295S, HONOLULU, HI 96835

circle #227 on Reader Service Card

review courses for divers who want to brush up on their skills before getting back into the water. There is also a variety of advanced diver courses. Staff instructors can offer full certification courses in PADI, NAUI, YMCA and SSI.

For information contact Don Foster's Dive Grand Cayman, P.O. Box 151, Grand Cayman, BWI (809) 949-7025 or Scuba Tours (800) 526-1394, (201) 256-9115 in NJ. 🌊

3M'S NEW SLIDE FILM

A new ISO 100 Scotch Color Slide Film offering increased color purity has been released by 3M/Photo Color Systems Division. The medium speed reversal film is balanced for daylight or equivalent lighting conditions at 5,500°K. It replaces the existing Scotch ISO 100 emulsion. 3M says that new yellow sensitization and newly formulated cyan and magenta couplers provide extremely brilliant and highly saturated colors. The new cyan coupler also eliminates leuco formation in marginal bleach and fixer situations. This and other features provide improved developing consistency in E-6 processes.

According to 3M, its new Scotch ISO 100 slide film offers very fine grain and excellent sharpness to ensure optimum reproduction. The new film is available only in 135 in DX coded cartridges of 24 and 36 exposures.

For more information about the new Scotch ISO 100 slide film or the rest of the Scotch or private label film lines, contact 3M/Photo Color Systems Division, 3M Center, Bldg. 223-2S-05, St. Paul, MN 55144. 🌊

BAJA/SEA OF CORTEZ

American Leisure, a wholesale tour operator with dive packages to Cozumel and Cancun, is now offering dive tours to Los Cabos. American Leisure will feature all inclusive packages including air transportation, \$3 U.S. departure tax, round trip transfers, hotel accommodations and boat diving.

American Leisure's local dive operator in Cabo San Lucas is Cabo Acuadeportes, owned by John and Molly Fox. It is a full watersports facility with two exclusive beachfront locations: the Hacienda Hotel and the Cabo San Lucas Hotel. Each day of diving includes tanks, backpack, weights, belt and boat guide. Cabo Acuadeportes, the only NAUI pro facility in Baja California, offers NAUI, PADI and YMCA courses.

For reservations and information on individual packages please have your local travel agent or dive shop call American Leisure at (713) 988-5777, (800) 392-2380 in Texas or (800) 231-5804 outside Texas. For information on group bookings please ask for Lisa Gunn or Maureen Venable. 🌊

STATIA-SABA ST. MAARTEN

THREE FOR ONE



Coral Star, our 115 foot dive yacht will take you to **STATIA**. The coastline is littered with the most accessible and abundant concentration of ancient shipwrecks in the Caribbean...

SABA. The spectacular virgin reefs are surrounded by walls, caves and crevasses, crowded with marine life...

ST. MAARTEN. Famous duty free bargains, casinos and friendly Dutch/French atmosphere ...

All three in one trip, and for **ONE ALL INCLUSIVE PRICE**.

M/Y CORAL STAR'S size and superior accommodations provide all the comfort and privacy of a secluded resort, yet its mobility allows us to put you on those remote dive sites inaccessible to most divers.

We offer

ALL INCLUSIVE "no surprises" pricing, a multitude of activities for the non-diver, weekly departures and a variety of itineraries that allow you the freedom to choose *your* type of vacation. To receive all the facts, our brochure and rates, call us Toll Free

(800) 433-DIVE

Californian and Canadian residents
call collect (805) 654-8100

CORAL STAR™

913 Harbor View, 4572 Telephone Rd.
Ventura, California 93003

circle #228 on Reader Service Card

COZUMEL DIVER'S RESORT

Galapago-inn

- 34 A/C Ocean-front Units
- Freshwater Swimming Pool
- New "Fat Grouper" Restaurant Overlooking the Ocean
- Complete Dive Shop on Premises
- Five Custom-made Dive Boats
- Friendly Staff

PACKAGES FOR INDIVIDUALS AND GROUPS
DIRECT FLIGHTS FROM HOUSTON, DALLAS, MIAMI & ATLANTA

S. C. U. B. A.



COZUMEL

GALAPAGO INN
P.O. BOX 289
COZUMEL Q ROO MEXICO
PH. (011-52-987)
20663

FOR RESERVATIONS & INFORMATION
1-800-847-5708
AQUA-SUB-TOURS
P.O. BOX 810306 HOUSTON, TX 77281
(713) 783-3305

circle #229 on Reader Service Card

TECHNIFACTS

(Continued from Page 86)

NAVIGATION CHARTS

Navigation, or nautical, charts are prepared jointly by the National Ocean Service, National Oceanic and Atmospheric Administration (NOAA) of the United States Department of Commerce and the Hydrographic/Topographic Center, Defense Mapping Agency of the Department of Defense. They are compiled principally from basic field surveys made by the U.S. Coast and Geodetic Survey. They are corrected and supplemented from information provided by various governmental agencies and from data provided by mariners and other users who find errors or omissions in the charts during use.

Charts and other publications (Tide Tables, *Coast Pilots*, Current Tables, and Tidal Current Charts) of the United States and possessions are published by the United States Department of Commerce and distributed to authorized agents by the National Ocean Service. Charts of countries other than the U.S. and its possessions are for sale by the Defense Mapping Agency, Hydrographic/Topographic Center and authorized agents.

Navigation charts of other countries are also published by the various governments. For example, charts of Canadian waters are distributed by The Canadian Hydrographic Service; of Great Britain by the British Hydrographic Office and are designated as British Admiralty (BA) charts. Several other countries have their own hydrographic counterparts and publish charts for their waters. Information, at least at the general level, is exchanged by governments through the International Hydrographic Organization (IHO) and navigational charts of all countries are usually up to date and quite accurate. Some authorized sales agents for U.S. charts also carry foreign charts.

For specific nautical charts of an area in the U.S., an excellent place to start a search is a marine supply store at a marina. If they do not have local charts they will know where to order them. In larger cities check the yellow pages of the telephone directory under the heading "Charts." If you are unable to find an authorized agent write directly to Distribution Branch (N/CG33), National Ocean Service, Riverdale, MD 20737—telephone (301) 436-6990—for the *Nautical Chart Catalog* for your area.

There are four catalogues listing charts and other publications for waters of the United States. They are: *Nautical Chart Catalog No. 1*—Atlantic and Gulf Coasts; *No. 2*—Pacific Coast, including Hawaii, Guam and Samoa; *No. 3*—for Alaska; *No. 4*—for Great Lakes and adjacent waters. *Nautical Chart Catalog No. 2* also lists charts for the Columbia and Snake Rivers for slack-water navigation from the



AquaVideo

T.M.

U/W Video Systems

AquaVideo offers more than 20 standard design U/W housings for amateur video systems, as well as professional video equipment. Custom-fitted (with short delivery times) housings can be made for any video system. Special inspection systems are available for commercial divers.

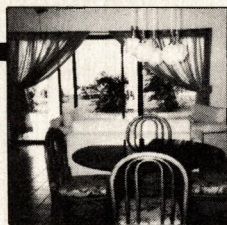
Five years of manufacturing experience make AquaVideo THE source for underwater video equipment. All AquaVideo™ housings feature exclusive advanced sealing technology for extreme reliability, as well as careful design for easy operation. Our SuperNova™ 350-700 watt lights combine maximum power, wide beam angle, and compact size. A full line of accessories completes the system.

ASK THE PROS WHO KNOW: NASA and the U.S. Navy Seals head a long list of satisfied pros and amateurs who have purchased AquaVideo™ housings and SuperNova™ lights.

AquaVideo, Inc.

5065 N.W. 159th St., Miami, FL 33014
(305) 621-0222 © 1986 by Rick Frensee for MediaTech Inc.

circle #230 on Reader Service Card



Divers ... COME LIVE IN LUXURY ON BONAIRE

Full service dive and photo facility on site.

- Beautiful beachfront property, every unit with balcony facing the sea.
- Studio, one, two, and three bedrooms available with full kitchen.
- Diving and snorkeling right off the beach.
- Underwater photography and video facility is now in operation.
- Full service dive shop, PADI Instruction with Andre Nahr.
- Visit the Green Parrot—our brand new oceanfront restaurant.
- Coming soon ... complete watersports activities, swimming pool, tennis and shopping.

Sand Dollar Beach Club

A Condominium

Bonaire, Netherland Antilles

For Sales and Dive Package Information Contact Sand Dollar:
50 Georgetown Road, Bordentown, New Jersey 08505

1-800-345-0805

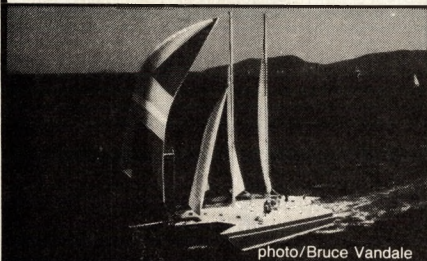
in N.J. call (609) 298-3844 for Sales Information
or (609) 298-2298 for Dive Package Information

circle #231 on Reader Service Card

TRIMARINE

Yes, we are the most experienced company in the British Virgin Isles—the owners and operators of the world famous

LAMMER LAW



photo/Bruce Vandale

But there are two other Trimarans you should know about if you have a small private party, or like diving with fewer people. You'll get the same high standard of food, service, and diving at a slightly lower cost! The 56' 8 passenger

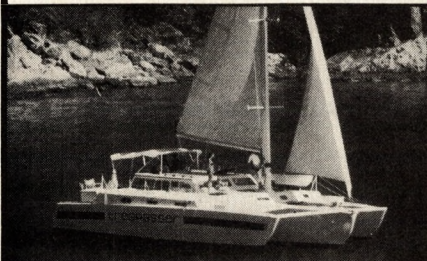
MISTY LAW



photo/Bruce Vandale

and the 48' 6 passenger

TRESPASSER



Whichever one you choose you'll leave us saying "Nobody does it better" and you'll be back!

Call Toll Free

800-648-3393

800-448-8866

or write-Trimarine
Homeport St. Thomas
USVI 00802

Pacific Ocean to Lewiston, Idaho above the Lower Granite Dam and to Asotin, Washington. It also lists the chart numbers for Franklin D. Roosevelt Lake in Washington, Lake Mead in Nevada/Arizona and Lake Pend Oreille in Idaho. There is no charge for the catalogues. In addition to a list of charts for the area, other information is also provided. This includes the scale of the charts, areas covered, inserts on the main charts and charts having Loran and Omega lines of position. Also listed are authorized agents for the sale of those charts and related publications and the names and addresses of agencies that can supply charts of foreign waters; the various river systems of the United States; and geologic, post route and general maps of the U.S. Equally comprehensive coverage is provided in the other catalogues for the specific areas.

CHART SYMBOLS AND ABBREVIATIONS

The first nautical chart a diver should acquire is *Nautical Chart No. 1, Symbols and Abbreviations*. This 52 page, soft cover booklet contains the symbols and abbreviations approved for use on nautical charts published by the U.S. Another important feature is a glossary of terms used on charts of various other nations. Even though divers may have been using charts for some time, modernization in recent years may use symbols new to old-timers. Buoyage systems, symbols for other aids to navigation, and the nature of both U.S. and international markings for things of concern are listed. The eighth edition (November 1984, \$2.50) is an informative bargain. Any order for charts listed in the catalogues mailed to the above address must be accompanied by a check or money order made payable to NOS, Department of Commerce.

USE OF NAUTICAL CHARTS

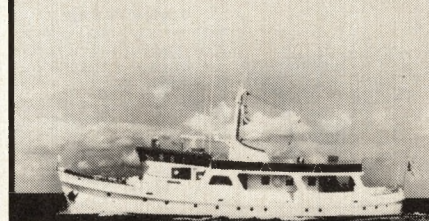
Nautical charts are published primarily for the use of mariners but serve the public, including the diving public, in many ways other than for the safe navigation by vessels. Charts are published in various scales to permit portraying different features of the area. In studying an area in which diving is being planned, two charts usually provide the needed information. For example, in researching for a series of dives on the wreck of the *Diamond Knott*, Coastal Chart 18400 serves as a guide to the general area. It shows the wreck off Tongue Point about 12 miles west of Port Angeles, well clear to the south of the inbound traffic lanes of the Strait of Juan de Fuca, and provides numerous warnings to help plan a safe operation in the area. An insert shows that Chart No. 18465 will provide better detail for the wreck site.

U.S. Chart 18465 (Canadian Chart L/C 3461 is almost identical) provides details

(Continued on Page 140)

BELIZE

MOONLIGHT MATING



Each year during the full moon in December and January, tens of thousands of grouper gather to spawn at one little known location on the coast of Belize. LA STREGA'S guests will have the opportunity to witness this phenomena.

LA STREGA, the live-aboard diving yacht in Belize, takes you diving in exotic areas that allow you the opportunity to experience that "out-post" atmosphere while enjoying all the comforts of a fine resort.

We offer:

ALL INCLUSIVE "no surprises" pricing, weekly departures and a variety of itineraries that allow you the freedom to choose from the best dive sites in Belize. To receive all the facts, our brochure and rates, call us Toll Free

(800) 433-DIVE

Californian and Canadian residents call collect (805) 654-8100

LA STREGA



913 Harbor View, 4572 Telephone Rd.
Ventura, California 93003

October Savings Specials



Our Winter sale catalog is now available! Hundreds of items from dozens of manufacturers, including U.S.TECH, Tekna, Oceanic, Sea Suits, Aqua Seal, Nikon, Whales Eye Photo, Aquacraft, U.S. Divers, Parkway, Poseidon, PADI, Seatec, Garrett, Fisher, Beuchat, Spare Air, Ikelite, Chronosport, Seiko, Heuer, and more! For the best prices, best service, and experienced staff, buy from Berry Scuba Company. We have been selling SCUBA equipment for over 27 years!

Chicago and Atlanta stores are minutes from airport and expressways



Triview Package
We have combined the most popular equipment in this super package ★ Silicone Triview mask with tempered glass, and double seal ★ Blue bore snorkel with silicone mouthpiece ★ Open heel adjustable vented fins. Ideal for SCUBA and snorkeling.
Retail \$125.00
Sale \$83.95



80, 65, 50 Cubic Foot Aluminum Tank
only \$59.95
Includes K-Valve

With ABC, U.S.TECH, or Shadow packages in this ad.

One tank per package.



Mask Package SD4
Quality equipment at an unbelievable price ★ Rubber vented fins with adjustable strap ★ Rubber mask with tempered glass and double seal ★ Big bore snorkel. Great for SCUBA, skin diving, and vacation!
Retail \$95.00
Sale \$42.95



ABC Deluxe Package
We have combined gear from the best: U.S.TECH Advanced Buoyancy Compensator (ABC) with rapid exhaust, power inflator, adjustable sides, waist support band, large pockets, back pack, and attractive colors (full two year warranty) ★ T-2100BX Tekna regulator with balanced piston first stage and ultra light weight second stage (one year warranty) ★ U.S.TECH Datacom II console with pressure, maximum depth indicating depth gauge, and built-in thermometer, with full lifetime warranty (see April '87 Skin Diver review) ★ U.S.TECH Sport octopus with yellow cover, silicone mouthpiece, and 36" hose and full two year warranty. Color coordinated with Pink, Turquoise, or red.
Retail \$1015.00
Sale \$595.00



U.S.TECH Package II
A complete package from one of the premier names in diving equipment! B-29 Jacket buoyancy compensator with rapid exhaust, power inflator, pockets, back pack, and waist support band ★ Ranger regulator with piston first stage and light weight synthetic second stage ★ Sport second stage with yellow cover, silicone mouthpiece, and 36" hose ★ Datacom Double console with pressure and depth gauges (featured in April '87 Skin Diver). Color coordinated.
Retail \$780.00
Sale \$435.00



Shadow Package II
For the diver who likes discrete, top quality equipment, we present some of U.S.TECH's best ★ The Shadow jacket BCD - all black - with rapid exhaust, power inflator, waist support band, back pack, pockets ★ Vanguard Professional regulator with high performance first stage and professional second stage, with SCUBA Guard case (reviewed in Jan. '87 Skin Diver) ★ Sport octopus with yellow cover and 36" hose (full two year warranty) ★ Datacom console with pressure and depth gauges, with full lifetime warranty. The choice of professionals. Color coordinated.
Retail \$980.00
Sale \$555.00

Accessories	
Octopus with 36" hose	\$44.95
Tank Boot	5.95
Hose protector	2.50
Wet suit shampoo	8.95
4 X 5 slate with pencil	4.95
Weight belt with 15 pounds	24.95
Blue bore silicone snorkel	9.95
Tire inflator for BC hose	8.50
Divers stiletto with 2 1/2" blade	18.95
Open heel vented fins	19.95
Wet suit hanger	12.95
100 lb lift bag	48.99



Heuer Black Coral Watch
The most popular watch we have ever sold! Features include Quartz movement, date, rotating ratcheted bezel, scratch resistant crystal, two tone black and gold body and bracelet, expandable to fit over wet suit! Looks great, and is priced right! Mens 980.029 Womens 980.028.
Retail \$445.00
Sale \$335.00

Books	
Underwater Video, Dick Jacoby	\$14.95
Dive Guide To Florida Keys	9.95
Dive Guide To Cozumel	9.95
Dive Guide To Grand Cayman	9.95
Dive Guide To Hawaiian Islands	9.95
Dive Guide To Virgin Islands	9.95
Treasure Hunting with U/W Metal Det.	9.95
Nikonos Handbook	19.95
The Undersea Predators, SDM	24.95
Treasure of The Alocha	24.95
SCUBA Equipment Care	11.95
The Decompression Workbook	9.95



Datacom II Console
Reviewed in April Skin Diver Magazine, the Datacom II Console is one of the most unique high quality consoles available. Color coded for clarity, with large easy-to-read numbers, full luminous faces, and heavy duty housing. The only totally complete lifetime warranty in the industry! Pressure gauge with built in thermometer, depth gauge with maximum depth indicating needle, and no-decompression tables on back.
Retail \$220.00
Sale \$119.95



Scuba Equipment Care Video
New! Learn how to assemble your equipment and the ins and outs of correct care, storage, and transportation. This video tape covers regulators, BCD's, suits, accessories, gauges, tanks, valves, snorkeling gear, and more! We'll show you how to clean your gear correctly, and basic equipment "first aid". The tape was designed and written by diving technicians and service people! Beta, VHS, or 8mm. **\$29.95**



U.S.TECH Sport Octopus
This octopus is constructed from a light weight composite that will stand up to the harshest conditions. Resistant to chemicals, debris, and corrosion! The Sport Octopus includes a 36" long hose, bright yellow second stage cover, and silicone mouthpiece. The housing is warranted for life, parts and labor for two years. From the diving innovators at U.S.TECH.
Retail \$115.00
Sale \$59.95

How To Order: Call Berry Scuba Co. at (312) 763-1626. Have your charge card and order ready. We can also answer questions and give expert assistance! We accept Visa, Master Card, Discover Card, American Express, and PADIcard. For orders only, call (800) 621-6019. This is our computer order phone, so no questions can be answered. **By Mail:** Send your order, along with charge card number and expiration date, or Certified Check, Money Order, or Cashiers Check to Berry Scuba Co., 6674 Northwest Hwy., Chicago, IL 60631. Include the required sizing information (Height, weight, chest for BCD's, foot size for fins). **Caution: Only certified divers should use SCUBA equipment. Obtain qualified instruction before diving.**

Berry Scuba Co.
6674 Northwest Hwy.
Chicago, IL 60631
(312) 763-1626

Berry Scuba Co.
#26A Yorktown Mall
Lombard, IL 60148
(312) 495-2822

Berry Scuba Co.
1717 Rand Road
Palatine, IL 60067
(312) 358-3848

Berry Atlanta
3443 Stewart Ave.
Hapeville, GA 30354
(404) 766-1186

In Store Only - Sherwood Packages - All Locations



Supreme Package
The best of Sherwood! The Freedom advanced BCD with power inflator, cummerbund, rapid exhaust, back pack, pockets, and more ★ The unique Oasis regulator that keeps your air moist ★ Shadow octopus that attaches to the power inflator ★ Double console with PSI, and thermometer, depth with max. ★ and your choice of a 50, 65, or 80 cubic foot tank with K valve and boot ★ Color coordinated.
Retail \$1350.00
Sale \$769.95



Deluxe Package
Just what you need at a great price! Sherwood's Freedom E advanced BCD with power inflator, rapid exhaust, pocket, more ★ Brut Regulator with light weight second stage. Also includes octopus with silicone mouthpiece and 36" hose, pressure gauge ★ your choice of a 50, 65, or 80 cubic foot tank with K valve and boot ★ Color coordinated.
Retail \$900.00
Sale \$529.95



Freedom II Package
This is one quality package! We start with the Freedom advanced BCD with power inflator, cummerbund, rapid exhaust, back pack, pockets, and more ★ Add the Magnum II regulator with sealed first stage. Also includes octopus with silicone mouthpiece and 36" hose, and pressure depth console ★ your choice of a 50, 65, or 80 cubic foot tank with K valve and boot ★ Color coordinated.
Retail \$1250.00
Sale \$669.95

Send or call for your free copy of our giant sale catalog!

WHERE TO GO



Low cost advertising that will increase your profits! For info call 213/854-2700. To place your order call toll-free 800/231-4053 (outside CA, U.S. only). VISA/MC

AUSTRALIA

The only IMPARTIAL U.S. booking office for dive boats and hotels throughout Australia and the South Pacific.

800 443-0799



ADVENTURE EXPRESS TRAVEL

185 Berry Street/Suite 5503/China Basin
San Francisco, CA 94107
415-442-0799

EXOTIC

SOLOMON ISLAND
\$2,000*

RED SEA
\$2,500*

MALDIVES ISLAND
\$2,900*

*Airfare not included.

Designed for an
Adventurous Group of 8
All Expeditions on
Superb Live-Aboard Boats
10 Days of Unlimited Diving
Personalized Dive Travel Service

LA MER

823 U.N. Plaza, Suite 817, N.Y., N.Y. 10017
212-599-0886 • 1-800-DIVE-NOW

THE BEST OF BELIZE



Unlimited diving on Belize's greatest Reefs from 75 foot *Isla Mia*. Light-house Reef, Blue Hole, fabulous dropoffs.
Supercharters for dive stores available.



See & Sea

TRAVEL SERVICE, INC.
50 FRANCISCO ST./STE. 205
SAN FRANCISCO, CA 94133
TELEPHONE (415) 434-3400
TELEX 278036 SEAS UR

RED SEA • SINAI

A PARADISE FOR DIVERS, WE INVITE YOU TO ENJOY A PERMANENT SPRING IN:

- SHARM EL SHEIKH,
- DAHAB AND
- NUWEIBA

Contact:

SINAI HOTELS & DIVING CLUBS
Central Reservation Office
32 Sabry Abu Alam St.,
Cairo, Egypt
Tel.: 770200-770301
Telex: 94002 OHTEG-UN



PAPUA NEW GUINEA



\$3,000*

*Airfare not included.

65' *Telita*, 5 A/C Cabins
Escorted by Bob & Dinah Halstead
10 Days of World Class Diving - 88° Water Temp.

LA MER

823 U.N. Plaza, Suite 817, N.Y., N.Y. 10017
212-599-0886 • 1-800-DIVE-NOW

Rascals in Paradise

World-wide family
vacations for divers
with children.

800 443-0799

185 Berry Street/Suite 5503
San Francisco, CA 94107
415/442-0799 TELEX 239446



LITTLE CAYMAN



\$699*

*Special Price 9/1-12/13/87.
Airfare not included.

Superb 65' *Little Cayman Diver*
5 Days of Unlimited Diving. All Meals
Best Wall Diving, Rich in Marine Life

LA MER

823 U.N. Plaza, Suite 817, N.Y., N.Y. 10017
212-599-0886 • 1-800-DIVE-NOW

LIMITED TIME OFFER

TRUK LAGOON

8 DAYS • \$1925

TRUK & PALAU

14 DAYS • \$2725

Above packages include airfare, hotels, diving
some meals, transfers and tax.

S.S. THORFINN

"Full Service live-aboard" \$1200

TROPICAL ADVENTURES TRAVEL

"Worldwide Dive Travel Specialists Since 1973"

800-247-3483 (Toll Free)

206-441-3483 (WA State)

170 Denny Way, Seattle, WA 98109

THE BRITISH VIRGIN ISLANDS



YACHT CAMELOT...
Let Don and Mavis pamper you aboard their luxurious Morgan Out-Island 51ft. They'll show you the finest dive sites in the Caribbean. Enjoy incomparable gourmet fare and great sailing. An unforgettable vacation for 4-6 guests!



VIRGIN ISLAND SAILING
P.O. Box 146, Road Town

Tortola, British Virgin Islands

TOLL FREE (800) 648-3393 or (809) 494-2774

ATTENTION DIVE STORES

call **800/231-4053**



in CA



213/854-2700

Expose yourself in the
DIVER'S DIRECTORY!

Call us for more info on profitable
advertising in this section.

Direct Marketing Division
P.O. Box 69910, Los Angeles, CA 90069

New Dive Packs!

SCUBA IN ARUBA!

Aruba, with the new Pelican Watersports, PADI-Certified, fully-equipped dive center now offers some of the world's finest diving—plus the best in Caribbean vacation pleasures.

From Starters to Stars, divers can choose wall, wreck and night dives with state-of-the-art dive boats and expert divemasters. We've got the 400 foot Antilla, the biggest wreck in the Caribbean. Four dive boat departures daily; unlimited refills.

7 night/8 day Land Package: \$479 per person*

(double occupancy)

3 night/4 day & 5 night/6 day also available.

Participating beach resort hotels with Pelican dive centers on the property:



American Airlines and Eastern both fly to Aruba twice daily.



PELICAN WATERSPORTS

PADI International Training Facility

P.O. Box 36, Oranjestad, Aruba

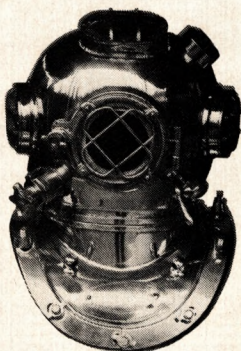
Telex: 5038 • Phone: (2978) 23888

For information and reservations call: **1-800-327-6709**

circle #234 on Reader Service Card

WEAR A DIFFERENT HAT BECOME A PRO DIVER

One complete course including air, mixed gas, saturation, U/W cutting and welding, and chamber operation.



An eligible institution for student loans & grants.
(Located in the Port of Philadelphia)

DIVERS ACADEMY OF THE EASTERN SEABOARD

2500 So. Broadway • Camden, N.J. 08104

Call **1-800-238-DIVE** in N.J. (609) 966-1871

NAME _____
ADDRESS _____
CITY _____ ST _____ ZIP _____
PHONE _____

SD-107

MARINE ARCHAEOLOGIST TALKS ABOUT METAL DETECTORS



"If I was limited to just one detector it would be the 1280-X."

Pulse detectors are great where artifacts are widely scattered, but they just can't match the 1280-X when it comes to working in a shipwreck ballast pile, especially when the ballast has a high metal content. As a professional underwater archaeologist and Treasure Hunter, I own a wide range of detectors to do all sorts of specific jobs, but if I was limited to owning just one detector it would be the 1280-X.

(Dr.) E. Lee Spence

President,

Shipwreck Consultants, Inc.

Write for free product reports.

Send \$2 for operating manual.

FISHER RESEARCH LABORATORY

1005 I Street, Dept. SD Los Banos, CA 93635

(209)826-3292

circle #235 on Reader Service Card

TECHNIFACTS

(Continued from Page 137)

of the wreck site and immediate surroundings. The wreck lies 0.3 miles off Tongue Point on the east side of Crescent Bay in about 20 fathoms of water with 10 fathoms over the wreck. Detailed depth contours are in fathoms on the U.S. chart; in meters on the Canadian publication. Tidal information for the area is printed on the chart as are navigational instructions and detailed Loran lines of position.

UNITED STATES COAST PILOTS

The *United States Coast Pilots* are a series of nine books that cover a wide variety of information for the safe navigation of U.S. coastal, intercoastal and Great Lakes waters. Most information contained in the pilots cannot be shown graphically on nautical charts and is not available from other sources. *Pilots* 1 through 7 are published annually; 8 and 9 every two years. The *Coast Pilots* cost \$8 each and cover:

Atlantic Coast

- No. 1—Eastport to Cape Cod
- No. 2—Cape Cod to Sandy Hook
- No. 3—Sandy Hook to Cape Henry
- No. 4—Cape Henry to Key West
- No. 5—Gulf Coast of Mexico, Puerto Rico and Virgin Islands

GREAT LAKES

- No. 6—Lakes Ontario, Erie, Huron, Michigan, Superior and the St. Lawrence River

PACIFIC COAST

- No. 7—California, Oregon, Washington and Hawaii

ALASKA

- No. 8—Dixon Entrance to Cape Spencer.
- No. 9—Cape Spencer to Beaufort Sea.

Subjects in the books include navigation regulations, outstanding landmarks, channel and anchorage characteristics, dangers, weather, ice information, shipping routes and facilities in the ports in the areas covered. For example, *Coast Pilot No. 7* (for Washington) discusses the area of Crescent Bay, the site of the wreck of the *Diamond Knott*, and lists navigational hazards in the vicinity. In an introduction to the West Coast area, the *Pilot* warns about the tides and how they differ from familiar tides of other areas.

TIDE TABLES

Tide tables are published in four volumes and sell for \$6.95 each from the address listed previously: Tide Tables, East Coast of North and South America; Tide Tables, Europe and West Coast of

Africa; Tide Tables, Central and Western Pacific and Indian Ocean.

They show predicted times and heights of high and low waters for every day of the year for many of the more important harbors. Differences for obtaining predictions for numerous other places are given in the annual tide tables.

Those planning a dive should be aware that Tide Tables predict the time and heights of high and low water *and not* the times of turning of the current or slack water. In planning for a safe dive it is important to remember slack water does not usually coincide with the time of high or low water. Also, the time of maximum velocity of tidal currents does not usually correspond with the time the height of the tide changes most.

TIDAL CURRENT TABLES

Advance information about currents can be crucial to boating and diving safety for several reasons. Currents setting against a strong wind tend to generate high, choppy seas that might be dangerous to boating and certainly for surface swimming. Such tables are also important in determining times of slack water.

Tidal Current Tables are published at \$5.50 each as follows: Tidal Current Tables, Atlantic Coast of North America; Tidal Current Tables, Pacific Coast of North America and Asia.

Also, Tidal Current Charts are published for selected bays and harbors on both the East and West Coasts of the U.S. Remember that the direction given for currents is opposite to that for the wind. For example, a west wind blows *from* the west; a westerly current sets *toward* the west. Remember, too, a tidal current of *one knot* is moving at a speed of 1.15 mph and has a current drift of 100 feet per minute. A diver cannot maintain a swimming speed of one knot for a prolonged period. Planning a safe dive demands that the diver comprehend the action and extent of tides, tidal currents and their times, velocities and other data.

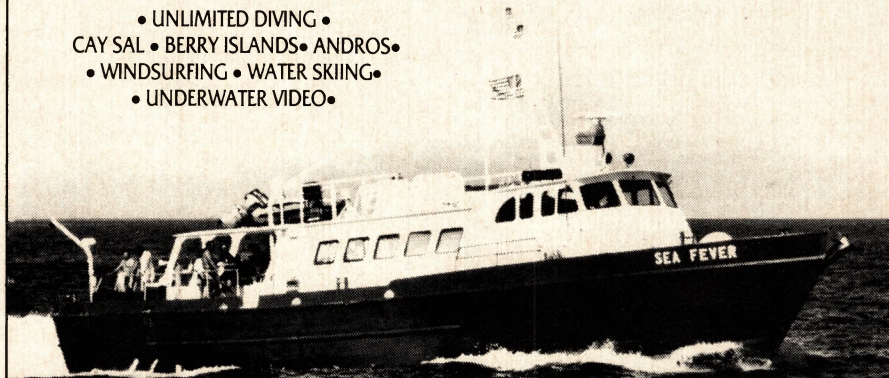
IN REVIEW

If for no other reason than planning a safer dive, divers should realize the importance of having a thorough knowledge of their environment. This includes the important features of movements of the water in which they will dive and all aspects of the environment. The ability to use charts, *Coast Pilots* or *Sailing Directions*, Tide Tables, Tidal Current Tables and all local publications about the diving environment will contribute to a greater enjoyment of a dive. I have found it rewarding to study applicable publications during planning stages of a dive and then review the data after the dives. This policy reinforces the knowledge I have gained of an area and helps me understand the relationship of "my" world beneath the water to that existing topside. We divers are people of two worlds. It is

BAHAMAS BOUND

Departures from Miami for World Class Diving Adventure
5 to 7 day Trips

- UNLIMITED DIVING •
- CAY SAL • BERRY ISLANDS • ANDROS •
- WINDSURFING • WATER SKIING •
- UNDERWATER VIDEO •



SEA FEVER

CATCH IT NOW!

P.O. Box 39-8276 Miami Beach, Florida 33139
FL 305-531-DIVE Toll Free 800-44-FEVER

circle #236 on Reader Service Card

Alpha Beta Gamma...

In the beginning you could dive almost anywhere and see reefs and walls that no one else had touched. No More! Today, everyone has already been there ahead of you. Unless you come to Grand Turk.

Just an hour and a half southeast of Miami is hidden some of the most untouched diving left in the Caribbean. In less than 25' our wall drops away so quickly it snatches your breath while Black Corals as thick as a forest grow just 15' below the drop.

And Beaches? You've heard of someone else's Seven Mile Beach? Ours is Eight! And there's hardly a diver on it.

Kittina Hotel - Turks & Caicos Islands
4197 Braganza Ave, Coconut Grove,
FL 33133 · (305) 667-0966

Omega - Diving Service of Grand Turk
8420 SW 133 Ave RD, Suite 319
Miami, FL 33183 · In the U.S.: (305) 385-0779
800-843-7544

**"Omega.
The Last Name
in Diving"**


©1986 Steve Lucas & Associates

circle #237 on Reader Service Card

FAMOUS "SKINDIVER"
CUSTOM
WET SUITS
 MADE IN U.S.A.
 NYLON 1 SIDE NYLON 2 SIDE
61⁹⁵ 101⁹⁵
 (Circle One)

Order direct and **SAVE!**
 Satisfaction guaranteed

Men's or women's custom tailored to your measurements with high pants and collar for super warmth. Finest wet suit material, completely nylon lined. Features sewn seams, noncorrosive zipper and twist locks. 1/4" or 3/16" material — mark your choice below. Just fill in your measurements and mail your order. Quicker delivery with Money Orders/Visa/MasterCard. Checks take 3 weeks to clear.

1/4" 3/16" 

Sex Age

Height

Weight

☐ Ankle
☐ Calf
☐ Knee
☐ Thigh
☐ Hips
☐ Waist
☐ Chest
☐ Neck
☐ Wrist
☐ Forearm
☐ Elbow
☐ Biceps
☐ Ankle to Knee
☐ Ankle to Crotch
☐ Ankle to Waist
☐ Shoulder Seam to Crotch
☐ Wrist to Elbow
☐ Bra and Cup Size
☐ Wrist to Armpit
☐ Hat Size

Include MC - VISA Expiration Date _____

☐ GLOVES \$12.95 ☐ BOOTS \$12.95
☐ HOOD \$11.95 ☐ FARMER JOHNS \$25.00
☐ ADD \$3.00 for Each NYLON 2 Accessory

MEN OVER 225 lbs. AND/OR 6'4" ADD \$35.00
 MEN OVER 250 lbs. ADD \$65.00
 WOMEN OVER 175 lbs. AND/OR 5'10" ADD \$35.00

\$6.00 for Postage/Handling, \$8.50 Canada, \$15.00 APO/FPO
 No C.O.D. WA State add Sales Tax, Incl. Postage & Handling
 VISA/MasterCard Orders Must Include Expiration Date.
CLIP AND MAIL THIS COUPON TODAY.

Skin Diver Wet Suits Phone: (206)
 1632 S. 250th 878-1613
 Kent, Washington 98032-5499

Name _____

Address _____

City _____ State _____ Zip _____

circle # 239 on Reader Service Card

TECHNIFACTS

important for us, and the two worlds, that we be in harmony. When we are in accord with the two environments we can almost, but not quite, complete the stories of our dives.

SKIN DIVER readers who have questions, comments or suggestions regarding the use of the navigational aids discussed in this column are urged to write to Technifacts, c/o Skin Diver, 8490 Sunset Blvd., Los Angeles, CA 90069. If interest warrants, a more detailed followup on the several subjects covered will be developed.

INDUSTRY STANDARDS TO ANSI

At a meeting held last June, U.S. diver training organizations agreed to submit their Industry Standards to the American National Standards Institute (ANSI) for certification. According to Ken Brock, coordinator for the meetings, "... This was a crucial step in updating the ANSI standards of the early 1970s.

"The approval also represents a continuation of the cooperation and successful working relationships established by the agencies that have accomplished a great deal in the past two years."

The minimum course content entry-level scuba certification standards endorsed by IDEA, L.A. County, MDEA, NASDS, NAUI, PADI, PDIC, SSI and YMCA will be forwarded to the ANSI secretariat for the ANSI approval process. The process includes evaluation and review by a balloting group of physicians, educators and scientists. Unanimous approval by this group is required before the standards can receive ANSI's official endorsement.

The training agencies are continuing to work together and have established several working subcommittees, including one to develop alternate air source use guidelines, one to develop leadership level standards and one to develop ethics guidelines.

SEE & SEA/CHINA

See & Sea Travel Service, Inc. has announced its spring schedule of tours combining land touring and diving in Southern China. These 18 day trips include six dive days off Southern Hainan Island, plus the famed Li River cruise, the City of Guilin and other wonders. In 1988 departures are set for March 9-26, April 6-23 and May 4-21.

For further information contact See & Sea Travel Service, Inc., 50 Francisco Street, Suite 205, San Francisco, CA 94133; or call (800) DIV-XPRT, in California call (415) 434-3400.



**Wet
your
whistle
but
don't
drown
it.**

Don't drink too much
of a good thing.

The
Distilled Spirits Council
 of the United States.
 1300 Pennsylvania Building,
 Washington, D.C. 20004

NEW

Decompression Computer
and depth Gauge.

Wrist \$306⁵⁰
Console w/PSI Gauge \$369⁵⁰
Console w/PSI & Compass \$412⁹⁵



LYCRA
BODY SUIT
Assorted Colors
\$39⁹⁵



CITIZEN
AQUALAND

•Depth gauge •660 ft. •Alarm
•Dive timer •Calendar

\$199⁹⁵



CASIO DEPTH GAUGE
CHRONO WATCH

•Depth gauge •660 ft.
•Stopwatch •Alarm
•Electronic calendar

\$47⁹⁵

THE MARINER

By Sea Elite

•Padded back pack
•Padded waist belt
•Tank security plate
•Quick release & adjustable
straps •Padded shoulders
& much more
•Auto inflator w/R.E. valve
•Limited life time warranty

List \$330.00
Sale \$189⁹⁵



SUPER SPECIAL II

CONQUEST ADVANCED DESIGN B.C.

By Sea Elite Systems

•Wrap around tank securing system
•Soft back pack (no hard plastic against your back)
•Padded comfort waist belt
•Many more features
•Limited life time warranty

List \$395.00

Sale \$199⁹⁵



SE 2000 HIGH
PERFORMANCE REGULATOR

By Sea Elite Systems

•High capacity balanced regulator
•Double seal piston o-rings
•5 L.P. ports & 2 H.P. Ports
•Colors: black, blue, yellow
•Limited lifetime warranty

List \$250.00

Sale \$129⁹⁵

TEKNA 2810 CONSOLE

•2 gauge console w/max depth
•Attached knife

List \$210.00
Sale \$128⁹⁵

Complete System List \$830.00
Sale \$449⁹⁵

The Conquest

By Sea Elite

•Wrap around tank securing system
•Soft back pack •Padded waist belt
•Rapid exhaust valve & much more
•Limited life time warranty

List \$395.00

Sale \$199⁹⁵



Free Shipping And
Insurance With
Orders Over \$75



SUSIE



BECKY

Call us at 1-800-241-4739

Use and operation of the support equipment should not be undertaken without qualified and proper instructions in their use. This ad does not imply the sale of the life support equipment through the mail.

JOHN
DONNA
RUSTY
RICHARD
ALLEN
MIKE

SILICONE SPECIAL

SEA ELITE

•Sea Elite single lens mask;
blue, yellow, clear, red.

SEA ELITE

•Sea Elite contoured snorkel with
purge; blue, yellow, clear, rose.

BEUCHAT

•Beuchat open heel fin; contact fin
comes in black, blue, pink.



\$65⁹⁵

SUPER SPECIAL IV

•TEKNA T-2100 BX REGULATOR

Featuring: Fully Environmentalized 2d Stage,
Total Balanced 1st Stage W/2 High Pressure
Ports & 4 Low Pressure Ports,
Life Time Warranty

•TEKNA T-2870 CONSOLE

This Remarkable Console Has It All:
Pressure Gauge, Depth Gauge With Max
Depth Indicator, Altitude Compensator,
Cobalt Compass, Automatic Digital Dive
Timer & Knife.

•SEA ELITE OCTOPUS REGULATOR

36 Inch Hose "The Safe Second"
Life Time Warranty

•THE MARINER BY SEA ELITE

•Padded back pack
•Padded waist belt
•Tank security plate
•Quick release & adjustable
straps •Padded shoulders
& much more
•Auto inflator w/R.E. valve

Only \$639⁹⁵



TANK
With This Package
\$39⁹⁵

80 Cubic Foot Aluminum Tank
W/K Valve
Limited One Tank For Package
•We Pay Shipping & Insurance

DESIGNER PLUSH SUIT

By Sea Elite

Farmer John wstep-in shorty
1/4" thickness. Nylon exterior
plush lining.
Navy blue with silver trim (mans)
Royal blue with silver (womens)
Cross zipper in shorty (mans)
Key pocket (mans)
French cut (womens)
All tapered edges, knee pads,
spine pad.

List \$500.00

Sale \$164⁹⁵



ALUMINUM TANK SPECIAL

With each \$400 purchase
you qualify to purchase one
tank at \$79.95 customer pay shipping.

\$79⁹⁵

Aluminum tanks 80, 67, 53, cubic ft.

Aluminum Tanks

In store only. \$89⁹⁵



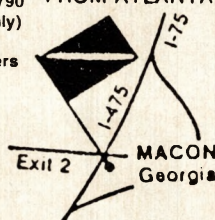
CALL OR VISIT ...

Information Express Line 1-912-474-6790
Toll Free Order Line (Out of state only)
1-800-241-4739

All our operators are certified divers
They speak your language
"Ask for free catalog"

Open seven days a week
Same Low Prices In Store
Located on Interstate
(at exit 2 on I-475)

FROM ATLANTA



TO FLORIDA

5208 Mercer University Dr.
Macon, Georgia 31210

NEVER UNDERSOLD

Divers Supply

WE SELL ALL MAJOR BRANDS FOR MINOR PRICES

SHERWOOD
SUPER SPECIAL VI

In Store Only

FREEDOM B.C.

Available colors: (navy/silver)
(lavender/pink) (turquoise/yellow)
(black/royal blue) (black/red)

Available sizes: extra small thru extra large
Sale price when purchased individually

List \$330.00 \$224⁹⁵

MAGNUM II REGULATOR

Available colors: (black) (blue) (lavender)
(yellow) (pink)

List \$236.00

Sale price when purchased individually



\$139⁹⁵

200 FT. TWO GAUGE
CONSOLE W/SLATE

Available colors: (black) (blue) (lavender)
(yellow) (pink)

Sale price when purchased individually

List \$145.50

\$94⁹⁵

Complete System List \$711.00 Sale \$439⁹⁵

SUPER SPECIAL III

PARKWAY OCEAN JACKET III

Available colors: black/silver/red

navy/blue/silver

Available sizes: Small thru extra large

List \$330.00 Sale \$209⁹⁵

SE 2000 HIGH
PERFORMANCE REGULATOR

By Sea Elite

Limited life time warranty

List \$250.00 Sale \$129⁹⁵

PARKWAY CONSOLE

2 gauge with max depth indicator

List \$130.00 Sale \$69⁹⁵

List \$710.00

Complete System Sale \$399⁹⁵



SUPER SPECIAL I

*ADVENTURE JACKET

Sea Elite advanced design

2 pockets, auto inflator,
cummertbund, limited life time warranty

List \$249.95

Sale price when purchased individually

*SE 1000 BALANCED REGULATOR

Rugged, dependable & high performance,
limited lifetime warranty

List \$205.00

Sale price when purchased individually

*PARKWAY CONSOLE

2 gauge with max depth indicator

Add \$49.95 for SE Octopus 39 inch.

We pay shipping & insurance

List \$130.00

Sale price when purchased individually

Complete Value \$584.95

System \$299⁹⁵

Sale Limited offer



SUPER SPECIAL IX

•Beuchat Voyager Regulator:

Balanced Regulator w/2 H.P.

ports and 4 L.P. Ports.

Limited Lifetime Warranty.

360° Swivel

List \$109.95 Sale \$129⁹⁵

•Beuchat Octopus

36" L.P. Hose w/orange housing

for high profile.

List \$85.00 Sale \$59⁹⁵

•Beuchat Console:

170' max. depth gauge &

pressure gauge. (Blue-yellow-black)

List \$130.00 Sale \$84⁹⁵

•Beuchat B.C.:

*New advanced design

bladderless B.C. w/soft touch

inflation system.

List \$310.00 Sale \$199⁹⁵

Total List \$724.95 Sale \$474⁸⁰

Complete System Sale \$459⁹⁵



Ocean Ray

289-G Suburban Avenue
Deer Park, New York 11729

WET SUITS

WRITE FOR FREE COLOR BROCHURE



\$159⁹⁵



\$399⁹⁵

ORDER DIRECT
from Manufacturer

SAVE \$

CALL TOLL FREE

800-645-5554

New York Residents

Call 516-667-7249

N-2 1/4" F.J. Regular \$134.95

N-2 1/2" shorty.....\$70.00

1/4" N-2 HOOD-BOOTS-MITTS

and 1/4" N-2 GLOVES ea. \$21.95

Ocean Ray WET SUITS are fully guaranteed for quality and fit. We offer a wide range of sizes. Alterations are also available.

• All Suits Navy & Royal Blue

• All Merchandise is

New Superflex Material

SAME DAY SHIPMENT

SATISFACTION

GUARANTEED

Hours M-F 8am-6:30pm

Sat. 9am-3pm E.S.T.

SHIPPING BY UPS:

Suits \$5.00 ea., Accessories \$2.50 ea.

Accessories w/suit \$1.00 ea.



\$174⁹⁵



\$139⁹⁵

circle #241 on Reader Service Card

WRECK FACTS

(Continued from Page 16)

nearly 2,000 ton *Regina* lies on her side with wine and champagne bottles strewn on the bottom nearby.

The *Regina* was one of 10 ships that foundered in 1913 during one of the worst storms in Great Lakes history. Seven others went down in Lake Huron: the *Scott*, *Carruthers*, *Argus*, *Hydrus*, *Wexford*, *McGean* and *Charles S. Price*. The coal carrier *Price* was found floating upside down after the storm and eventually sank several miles from the *Regina*. In William Ratigan's book, *Great Lakes Shipwrecks and Survivals*, it says a mystery evolved when the body of the chief engineer of the *Price* was found wearing a life preserver from the *Regina*. Ratigan speculates the two ships came together or the lost crews intermingled in the water during the combination hurricane and blizzard. Fifteen men from the *Regina* and 23 from the *Price* were lost. Total casualties from all ships included 235 officers and crew.

Bob Margulis, Seattle, Washington has heard a rumor about three World War II Japanese subs sunk in Puget Sound. Two are supposed to be in very deep water in the Strait of Juan de Fuca and one is rumored to be in 70 feet near Port Townsend. Bob wants to know how to research these wrecks. I haven't heard anything about them Bob, but that doesn't mean they aren't there. They are not mentioned in *Shipwrecks of Juan de Fuca*. I suggest you write to: Operational Archives Branch, Department of the Navy, Naval Historical Center, Washington Navy Yard, Washington, DC 20374. They have the 15 volume series of Samuel E. Morison's *History of U.S. Naval Operations in WW II*, in addition to other possible resources. Also, write to Don Marshall, 788 Franklin Avenue, Astoria, OR 97103. Don wrote books on California and Oregon shipwrecks and is an expert on losses in the Washington area. If readers have any information, write to Bob Margulis, P.O. Box 31411, Seattle, Washington 98103.

Although the coast of Virginia is scarcely 100 miles long, 220 ships were wrecked there from 1874 to 1915. The U.S. Lifesaving Service assisted in 600 incidents off the Old Dominion State's shores, all documented in a new book: *Shipwrecks on the Virginia Coast and the Men of the United States Lifesaving Service* by Richard and Julie Pouliat. The 225 page hardback chronicles the heroics of the USLSS and provides an index of vessels that wrecked or required assistance in times of distress. This book is available from Cornell Maritime Press, P.O. Box 456, Centreville, MD 21617. The price is \$16.95.

DISCOUNT CHRONOS

and hi-tech items

1 YEAR WARRANTY — 30 DAY TRIAL

ON THE RUN guarantees the lowest prices, largest selection, fastest service, 1-year warranty on all watch modules and a 30-day trial. We're North America's largest sportswatch dealer and we'll meet all prices in this magazine!

We give you our full address and our own toll-free order center (not just an answering service).

—FOR FASTEST ACTION—
CARD HOLDERS ORDER TOLL-FREE
800-437-4385

Credit card holders may use toll-free number above or send check or money order plus \$3.00 for each watch. Add an additional \$2.00 for U.P.S. air delivery. North Dakota residents add 5 1/2% tax.

On The Run

107 Roberts St., Dept. SK-10
P.O. Box 67, Fargo, ND 58107
Telephone (701) 232-9400

Write for a free one-year subscription to our catalog of timepieces and hi-tech items for better living.

CASIO AQ-100WG

FEATURING—

- 330 ft. waterproof
- 1/10 stopwatch
- Daily/hourly alarms
- Luminous hands/dial
- Dive time bezel
- Digital display
- 12/24 time
- Dual time
- Calendar
- Long life battery



only
\$49⁹⁵

NEW CITIZEN AQUALAND ELECTRONIC DEPTH METER CHRONO

FEATURING—

- Super-accurate depth gauge from 1 meter to 80 meters
- Waterproof to 660 feet
- Depth alarm, depth recording, dive time recording
- Audible dive time alarms
- Digital stopwatch
- Luminous hands/dial
- One-way bezel, safety locks
- Calendar, depleted battery warning signal

ALSO AVAILABLE
Two-tone Aqualand



\$249.95 **\$199⁹⁵**

MEN'S 200M DIVER

FEATURING—

- 660 ft. waterproof
- Swiss ESA movement
- One-way bezel
- Screw-down crown
- Luminous hands/dial
- Stainless case, calendar
- Quality equal to Heuer and Seiko



\$49⁹⁵

CASIO NAUTILUS

FEATURING—

- Depth gauge to 300 feet
- Waterproof to 660 feet
- Professional stopwatch
- Countdown dive-time alarm
- 12/24 hour time, 3 alarms
- Electronic calendar, AM/PM
- 12-digit LCD display
- Night light, long life battery



\$49⁹⁵

PRO 1000M DIVER

FEATURING—

- 3,300 ft. waterproof
- One way ratcheted bezel
- Screw down crown
- 1/100 sec. stopwatch
- Stainless case/resin band
- Super quartz accuracy
- 3 yr. battery



\$89⁹⁵

LADIES' 200M DIVER

FEATURING—

- 660 ft. waterproof, 1/4 size
- Swiss ESA movement
- One-way bezel
- Screw-down crown
- Luminous hands/dial
- Stainless case, calendar
- Quality equal to Heuer and Seiko



\$49⁹⁵

CASIO DW210

FEATURING—

- Withstands high/low temps.
- 5-year battery, 3 alarms
- 1/100 stopwatch
- 12/24 time, 12-digit LCD
- Countdown timer
- Night light, calendar
- 1/4 oz. case/band



\$39⁹⁵

CASIO TOUGHWATCH II

FEATURING—

- 330 ft. waterproof
- Withstands high/low temps.
- 5-year battery, 3 alarms
- 1/100 stopwatch
- 12/24 time, 12-digit LCD
- Countdown timer
- Night light, calendar
- 1/4 oz. case/band



\$29⁹⁵

CASIO TS1200

FEATURING—

- 330 ft. waterproof
- Reads temp. in F° or C°
- 1/100 sec. stopwatch with repeat every hour
- Temp/daily/hourly alarms
- Calendar, 12/24 hour time
- 8 time zones, night light
- 1/4 oz. case/band



\$39⁹⁵

Texas divers who have asked for a list of treasure wrecks off the shores of the Lone Star State will find a good one in *Texas Treasure Coast* by Tom Townsend. The author covers Padre and Galveston Islands' golden galleons, treasure of the steamers *Louisiana* and *Nautilus*, the mystery of the *U-166* and other intriguing Texas shipwrecks. The 100 page hardback may be ordered from Eakin Publishers, P.O. Box 23069, Austin, TX 78735. The price is \$8.95.

Safe diving to all. Be sure to include a stamped, self-addressed envelope when writing to: Ellsworth Boyd, 1120 Bernoudy Road, White Hall, MD 21161.

DATAMASTER I

(Continued from Page 47)

sole but have no particular need for a decompression computer, the Datamaster I could be your ideal choice. It is exceptionally easy to read, fully automatic and very easy to operate.

Our open water tests of the Datamaster I were conducted over two, one week dive trips, averaging three dives per day. The instrument functioned flawlessly throughout the test period and the digital displays were exceptionally accurate.

We have become so attached to the Datamaster I that we have continued to use it ever since. Incidentally, we found this console to be an excellent backup

when used in conjunction with an independent dive computer worn on the arm.

The Datamaster I retails for \$419. The Slimline compass is an extra \$47.50 and the MiniHylite sells for \$10.50. Another handy accessory is Oceanic's HP Quick Disconnect Kit, which sells for \$52. This kit allows you to quickly disconnect your console from the first stage.

For more information, a catalogue or the location of your nearest Datamaster I dealer, contact Oceanic USA, 14275 Catalina Street, San Leandro, CA 94577-5589; call toll free (800) 458-8880.

DELTA 38

(Continued from Page 48)

ample storage bins along the gunwales.

The Delta 38 is a very well appointed and equipped dive boat with a lot of useful features. At the bow is an anchor/rope locker for easy storage, bow chocks, bow pulpit and a large open deck for sunbathing. The bridge cockpit is fully equipped with U.S. Coast Guard regulation safety devices and complete instrumentation. A Bimini top is included as are many little things you might not think of before you need them such as: fogbell, horn, interior lighting, engine hour meter, windscreens and much more.

Hydraulic steering makes maneuvering the large boat easy and four different power plants can be custom fitted for your requirements. Either single or twin

screws can be ordered. A raw water strainer is added to ensure no foreign materials enter the water intake and an engine alarm system is included to warn if the engine begins to overheat.

The floor of the cockpit forms part of the open saloon roof with a head clearance of 6' 7", so even the tallest diver can

DELTA 38

Length overall.....	38'
Waterline length.....	34' 8"
Beam.....	12' 5"
Draft.....	3'
Freeboard forward.....	5' 2"
Freeboard aft.....	3' 6"
Saloon headroom.....	6' 7"
Deadrise forward.....	30 degrees
Deadrise aft.....	13 degrees
Fuel capacity.....	300 gallons
Freshwater capacity.....	50 gallons

escape from bad weather.

The Delta 38, with its long list of standard features and optional equipment can be furnished to your specifications—whatever your needs may be. Normal time for delivery is about 60 to 120 days from the order date. With a base price of \$85,712, the Delta 38 is a serious dive boat for a serious captain. For more information on the Delta 38, or any of the company's other fine product lines, contact Delta Boat Works, 746 Mullet Road, Cape Canaveral, Florida 32920 or phone (305) 783-3536.

HELIX SPECIAL NIKONOS PACKAGES

- Pkg. 3a: Nikonos V camera, 35mm 12.5 UWN, Speedlight SB-103 (with arm, tray, sync cord, diffuser, case and spare o-rings), and equipment case (18x13x8") w/foam **\$ 809.00***
- Pkg. 3b: Nikonos V camera, 35mm 12.5 UWN, Speedlight SB-103 (with arm, tray, sync cord, diffuser, case and spare o-rings), Helix basic ext. tube set and equipment case (18x13x8") w/foam **\$ 885.00***
- Pkg. 3c: Nikonos V camera, 35mm 12.5 UWN, Speedlight SB-103 (with arm, tray, sync cord, diffuser, case and spare o-rings), Marine Eye (28mm) adapter, Close Eye V w/framer (1:5), and equipment case (18x13x8") w/foam **\$ 909.00***
- Pkg. 4a: Nikonos V camera, 35mm 12.5 UWN, Aquafash 28 TTL (with arm, tray, TTL sync cord, remote sensor w/slave, diffuser-15mm- and spare o-rings), dive light, light mount and equipment case (18x13x8") w/foam **\$ 905.00***
- Pkg. 4b: Nikonos V camera, 35mm 12.5 UWN, Aquafash 28 TTL (with arm, tray, TTL sync cord, remote sensor w/slave, diffuser-15mm- and spare o-rings), Helix basic ext. tube set, dive light, light mount and equipment case (18x13x8") w/foam **\$ 980.00***
- Pkg. 4c: Nikonos V camera, 35mm 12.5 UWN, Aquafash 28 TTL (with arm, tray, TTL sync cord, remote sensor w/slave, diffuser-15mm- and spare o-rings), Marine Eye (28mm) adapter, Close Eye V w/framer (1:5), dive light, light

Dive, dive, dive!

mount and equipment case (18x13x8") w/foam **1005.00***

Cameras are supplied with battery and spare o-ring set.

*Qualities for Nikon USA Lycra Skins offer!

HELIX EXTENSION TUBES

Most versatile system in the world for Nikonos lenses below and above water!

Basic extension tube set for 35mm UWN (2:1, 1:1, 1:2) ... **\$ 86.00**

Deluxe extension tube set for 35mm UWN (2:1, 1:1, 1:2, 1:3) **120.00**

Master extension tube set (1:1.8, 1:2.75 for 28mm UWN, 2:1, 1:1, 1:2, 1:3 for 35mm UWN) **154.00**

Super master extension tube set (2:1, 1:1, 1:2, 1:3 for 35mm UWN, 1:1, 1:1.8, 1:2.75 for 28mm UWN) **171.00**

Extension tube w/framer for 35mm (1:1) **39.50**

Extension tube w/framer for 35mm (1:2) **39.50**

Extension tube w/framer for 35mm (1:3) **39.50**

Extension tube set for 28mm UWN (1:1, 1:1.8, 1:2.75) **86.00**

Extension tube w/framer for 28mm (1:1.8) **39.50**

Extension tube w/framer for 28mm (1:2.75) **39.50**

NEWI Frammer only 1:1 (surface only) for 35mm UWN w/blue tube **25.00**

NEWI Frammer only 1:2 (surface only) for 35mm UWN w/green tube **25.00**

NEWI Frammer only 1:3 (surface only) for 35mm UWN w/red tube **25.00**

Set of 3 framers only 1:1, 1:2 and 1:3 (surface only) for 35 UWN **59.00**

Close focus wide angle adapter (59°) for 35mm UWN w/red tube (focus 9" to 3-1/2') **65.95**

Close-up lens w/framer (1:2) for 35mm UWN w/red tube **65.95**

HELIX UNDERWATER PRODUCTS

HUP-200 dive light **\$ 14.95**

HUP-201 dive light w/high intensity kit **19.95**

6" EO to Nikonos III/IV **63.50**

6" EO to Nikonos III/IV/V **63.50**

10 ft. EO ext. male/female **107.00**

20 ft. EO ext. male/female **116.00**

Helix double bracket set for SB-102/103 **199.00**

Helix double bracket only **85.00**

Audible water detector kit **29.95**

Audible water detector kit w/LED **39.95**

Equipment case w/die-cut foam for Hanimex or Sea & Sea 35mm w/slave strobe **23.95**

Equipment case w/foam (18x13x8") **44.95**

HELIX AUTO MARINE II HOUSING

Tested to 100 feet. May be used with the Nikon L35AF, Nikon One-Touch, and New Canon Sure Shot.

Helix Auto Marine II Housing (please specify camera) **\$ 99.00**

Helix Universal Slave Strobe w/arm for Hanimex/Sea & Sea 110 or 35mm, Helix Auto-

Marine Housing, Ikelite disc or trim case (please specify) **\$ 98.00**

HANIMEX

Amphibian 110 camera w/universal slave strobe and arm **\$ 185.00**

Amphibian 35 camera w/universal slave strobe, arm and case w/die cut foam **305.00**

8mm VIDEO PACKAGES

Display or Demo Sony Pak-8 (Handycam, record/playback deck & carrying case) with new Aqua Vision

Capsule 8 **\$ 1469.95**

with new Ewa U-VM housing **\$ 895.50**

with new Ikelite #6030 housing **999.00**

with new Ikelite housing & wide lens adapter **1149.50**

with new Sony housing **1670.00**

optional HL-4000 (100 w/48 mins./175 w/27 mins.) **695.00**

optional HL-7000 (100 w/75 mins./175 w/40 mins.) **799.00**

optional Ikelite (100 w/15 mins) **187.00**

optional Sony (50 w/30 mins.) **449.00**

optional RM-E100V editing console **175.00**

optional marine filter **55.00**

Call our Underwater Department for more information on available video systems!

HELIX PHOTO/DIVE TRIPS!

Australia Oct. 24-Nov. 7, 1987

Bonaire Jan. 9-16, 1988

Philippines March 26-April 8, 1988

HELIX

**310 South Racine Ave.
Chicago, Illinois 421-6000**

Underwater orders and information:

800-33 HELIX

Helix Worldwide Telex #701713 answer back: HELIX CGO UD

Quantities limited. Prices subject to change.

Shipping or insurance charges not included.

U.S. largest inventory of underwater photography equipment!

Most orders shipped from stock within 3 business days.

Call for our FREE Underwater catalog and booklet!

PRICE BUSTERS

PRICES SLASHED TO LIQUIDATE \$1,000,000 INVENTORY.



SUPER WET SUIT
FARMER JOHN With JACKET
FOUR-WAY STRETCH
PLUSH LINED

~~219⁹⁵~~
139⁹⁵
ADD \$4.50 SHIPPING



**PARKWAY ATLAS
BALANCED REGULATOR**
With LIFETIME WARRANTY

~~159⁹⁵~~ **109⁹⁵**
ADD \$4.00 SHIPPING



SEA HAWK KNIFE
by U.S. DIVERS

7 3/4" polished blade. 6" scale.
Serrated back Massive butt cap.
Sure-grip rubber handle.

NOW ONLY 29⁹⁵



**US SCUBA
PROFESSIONAL
BC JACKET**
With BACK PACK And
POWER INFLATOR

~~219⁹⁵~~ **99⁹⁵**
ADD \$5.50 SHIPPING



**ADVANCED DESIGNED
JACKET - ADV**
With BACK PACK And
POWER INFLATOR

~~299⁹⁵~~
NOW ONLY 179⁹⁵
ADD \$5.50 SHIPPING



**PARKWAY
DELUXE COMBO**
DEPTH — PRESSURE GAUGE
With MAX—DEPTH INDICATOR

NOW ONLY 74⁹⁵
ADD \$3.50 SHIPPING

SPORTS MERCHANDISERS

1690 COBB PARKWAY, SE
P.O. BOX 1262
MARIETTA, GA 30061

1-800-241-1856
IN GEORGIA CALL (404) 952-3259

RETAIL STORE CONVENIENTLY LOCATED WITH-IN 15 MINUTES OF INTERSTATES; I-75, I-85, I-20, I-285 and DOWNTOWN ATLANTA.

circle #242 on Reader Service Card

Northwest Divers Supply

FREE GIANT 186 PAGE CATALOG



Nemrod
QUALITY DIVING EQUIPMENT SINCE 1935

SUPER SALE!!
CLOSEOUT '86 MODEL

SAVE UP TO 75% OFF LIST PRICES

#1 ECONOMY PACKAGE

- Nemrod Delta II Regulator (lifetime warranty)
- Beuchat Pressure Gauge
- ADV Style BC

LIST PRICE \$609.95

OUR PRICE ONLY \$259⁹⁵

Regulator Specials

	LIST	SALE
*Saturn 300 Pro	\$279.95	\$120
*Saturn 300	239.95	100
*Delta II	210.00	85

(*Lifetime Warranty)

Falcon Silicone Masks

List \$39.95 SALE **\$19.95**

#2 DELUXE PACKAGE

- Saturn 300 Pro Regulator (adjustable 2nd stage - balanced 1st stage)
- Delta Octopus Lifetime Warranty
- Beuchat SPG & Depth Gauge with MDI
- ADV Style BC

LIST PRICE \$839.95

OUR PRICE ONLY \$399⁹⁵

Add 80 cu. ft. Sherwood Tank & K-Valve \$79.95

To Order Call Toll Free
1-800-843-1229 in USA

or
1-800-443-8485 in California

505 Summer Street
Eureka, CA 95501

FREE SHIPPING ON ALL NEMROD PRODUCTS
WE SERVICE ALL NEMROD REGULATORS & SPEARGUNS

TANKS EXCLUDED

circle #243 on Reader Service Card

DIVING MEDICINE

(Continued from Page 23)

times, during a heart attack, the heart stops beating. This results in sudden death and these have been reported underwater. The alternative is damage to the heart and progressive pain, which in the best of situations generally results in panic. The well trained, calm and experienced diver might, in this situation, respond by slowly swimming to the surface, carefully returning to the boat and asking for help. With proper assistance he/she would be transported to a local hospital for treatment. The not so well trained diver, on the other hand, is likely to panic, to bolt uncontrollably to the surface not thinking of his breathing pattern and develop an air embolism in addition to his heart attack. These events are not hypothetical, they have actually occurred. As we grow older in diving and the incidence of blood vessel disease—especially aggravated by smoking—increases, we will find a greater incidence of heart attacks during diving. Clearly, cigarette smoking is not the only factor that contributes to this event, but it is certainly an important and major one.

SUBSCRIBER SERVICE

MOVING?

Don't miss a single issue of **SKIN DIVER**. Let us know your new address right away.

OLD ADDRESS

(Be sure to write your old address exactly as it appears on the front cover of this magazine.)

Name _____
Address _____
City _____ State _____ Zip _____

NEW ADDRESS

Name _____
Address _____
City _____ State _____ Zip _____

QUESTIONS ABOUT YOUR SUBSCRIPTION?

When you write, be sure to write your address exactly as it appears on the front cover of this magazine. It helps us to serve you more promptly.

TO SUBSCRIBE OR EXTEND YOUR SUBSCRIPTION

Check the appropriate boxes below:

- ☐ New subscription. Please allow 4-8 weeks for your first copy to be mailed.
- ☐ Renewal subscription. Please write your address in the OLD ADDRESS section above, exactly as it appears on the front cover of this magazine.
- ☐ 1-year (12 issues) \$19.94. This rate limited to the U.S.A. and its Possession.
- ☐ Payment enclosed or ☐ Bill me.

Mail to: **SKIN DIVER**
6725 Sunset Blvd. P.O. Box 3295
Los Angeles, CA 90078

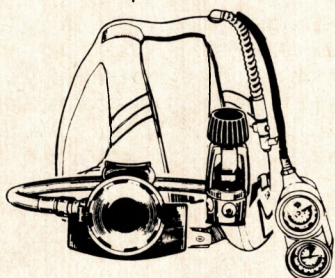


**SCUBA
WORLD**

**TOLL FREE
ORDER LINE**

**US 1-800-843-3916
FL 1-800-826-9658**

**Economy Package
\$299.00**



Includes: Lifetime Warranty
Regulator, Combo Gauge w/
max - depth, BC Jacket w/
power inflate for Advanced
Style Vest add \$40.00

**Complete
Starter Package
\$99.00**



Includes: Mask, Snorkel, Fins
Weights, Belt, Glove & Boots

★ SPECIALS ★

Combo w/Max-depth	74.95
Super QXL-3 Light	19.95
ADV Style BC	179.95

ALTAMONTE SPRINGS

937 W. SR 436

(305) 862-5489

LONGWOOD

1667 S. US 17-92

(305) 695-0991

DELAND

1941 S. Woodland

(904) 734-3483

WINTER PARK

1045 N. Semoran

(305) 677-5489

ORLANDO

8092 S. O. B. T.

(305) 855-4759

Life support equipment should not be used or
operated unless properly trained and certified.
This ad does not constitute an offer to sell via
mail order.

There is a tremendous body of knowl-
edge involving the negative health effects
of cigarettes. The cost of smoking to the
health care system is estimated to be
many billions of dollars per year. Many of
us in medicine spend a part of every day
caring for people with complications of
cigarette smoking. Many of these directly
interfere with diving. Because of these
detrimental effects, and because ciga-
rette smoking can interfere directly with
diving safety, it will be worthwhile for all
of you who smoke to consider reducing
or stopping your smoking habit alto-
gether, and especially, to not smoke im-
mediately before diving.

ACHILLES SK-140

(Continued from Page 57)

tion/deflation valves, capped for added
protection; oars, which can be stowed on
the top outboard sides of the aft tubes;
two carrying bags; a foot bellows (pump);
a repair kit; and the aluminum floor-
boards already mentioned.

The Achilles SK-140 is quite roomy for
a boat of only 14 feet overall. The inside
length is eight feet eight inches. The
beam measures five and one-half feet
outside and two and one-half feet inside,
with tube diameters of just under 18
inches. The tubes are divided into four
separate air chambers, with a fifth air
chamber in the inflatable keel. Typically,
the greater number of chambers, the
greater the safety. This boat can handle
outboard motors in the range of 10 to 50
horsepower, but 30 is recommended.
When stowed, the folded boat and floor-
boards can fit into a space about four and
one-half by two and one-quarter by one
and one-half feet. If the floorboards are
stowed separately, both boat and boards
could fit under a large bed.

Port-A-Marine, of Costa Mesa, Califor-
nia, prepared the SK-140 used in the
open water trials for this article. The loca-
tion for the tests was a few miles outside
the Newport Harbor jetty. The surface
water conditions were very choppy at
first, but settled down a little later in the
day. The SK-140, loaded at various times
with two to three divers and their gear,
complete with extra tanks, performed
well. It planed rather easily, tracked
straight, executed tight turns with relative-
ly little side slip and moved at a good
speed over the water—but the ride was
bouncy. Any boat would have bounced in
the kind of chop we encountered. An in-
flatable with an inflatable keel, however,
can exaggerate the bounce somewhat,
because the bow has a softer curve that
doesn't cut through the oncoming chop
as sharply as a deep-V rigid keel boat.
This extra bouncing might be more than
compensated for the offsetting advan-
tages of an inflatable keel: less weight,
less storage space, less maintenance
and less damage when running onto
reefs, rocks or even a sandy beach.

35th ANNIVERSARY SALE

CENTRAL SKINDIVERS is a full time, full line Pro Shop.
For 35 years we have tested new products and helped
design many items used today. We know every diving item
made.

CENTRAL has the newest and best items from throughout
the world at the lowest possible prices. CENTRAL has
thousands of items not shown in this ad. Just call for
YOUR DISCOUNT PRICE!!!

Nobody ships quicker or sells for less. If it's a "Package"
or an individual item, **CENTRAL** guarantees to beat any
advertised price. Whip out your credit card and call
CENTRAL now!



DELUXE CONSOLES

PRESSURE/MAX-DEPTH COMBO	\$ 69
PRESSURE/DEPTH/COMPASS SUPER TRIPLE	\$110
PRESSURE/TEMP/MAX-DEPTH/COMPASS	\$130
PRESSURE GAUGE W/HOSE	\$ 49
OIL FILLED DEPTH GAUGE	\$ 25

**FAMOUS MAKE CONSOLE W/PRESSURE GAUGE,
MAX DEPTH, COMPASS & DIGITAL BOTTOM TIMER \$160**

Central pays shipping
PRESSURE AND DEPTH GAUGES FROM US DIVERS,
DACOR, OCEANIC AND TEKNA ALWAYS ON SALE.

FAMOUS BRAND REGULATORS

SUPER DELUXE (List \$280)	\$169
DELUXE BALANCED PISTON (List \$240)	\$149
FLOATING SEAT PISTON (List \$198)	\$139
SUPER PISTON (List \$180)	\$105
OCTOPUS (LONG HOSE) (List \$90)	\$ 49

Central pays shipping
REGULATORS FROM US DIVERS, DACOR, SHERWOOD,
SEAQUEST, TEKNA, TABATA, ETC. ALWAYS ON SALE.

STABILIZING JACKETS

Famous Makes, Best Quality.
Low Pressure Inflator & Hose.
Quick Dump, "Travel" Kam Pack

PRO A.D.J. STYLE (S, M, L or XL)	\$179
MANTA STYLE (S, M, L or XL)	\$249
SEAJACKET VI (M, L, OR XL)	\$199
CLOSEOUT B.C. JACKETS (M or L)	\$139

Central pays shipping
B.C.'s AND STAB JACKETS FROM SHERWOOD,
US DIVERS, DACOR, SEAQUEST, SEATEC,
PARKWAY, TABATA, ETC. ALWAYS ON SALE.

THERMO-PLASTIC FIN

Jet Type Blade
Vented Clear/Black Plastic
Adjustable Straps

CLEAR STRAP FIN (M or L)	\$33
GRAPHITE STRAP FIN (M or L)	\$38
TRI-VUE SILICONE MASK	\$29
SILICONE VENT SNORKEL	\$12
NYLON-2 HARD SOLE BOOTS	\$19

Central pays shipping

WATCHES

CITIZEN AQUALAND ON SALE	
SEIKO AUTOMATIC DATE	\$149
CHRONOSPORT AUTOMATIC DATE	\$139
HEUER QUARTZ DATE	\$179
CHRONOSPORT GOLD QUARTZ	\$350
CHRONOSPORT U.D.T. STRAP	\$329
HEUER BLACK CORAL II	LOWEST PRICE

Central pays shipping
ALL OTHER WATCHES ALWAYS ON SALE

PACKAGE DEALS

CENTRAL sells all famous brands. We guarantee
to beat any package deal. Call for your super
discount price on any package you want.

ALUMINUM 80 CU. FT. K VALVE TANK	CALL
ALUMINUM 100 CU. FT. K VALVE TANK	\$159
1/4" FARMER NYLON 2 SUPERSTRETCH	\$129
1/4" FARMER STEP-IN SUPERPLUSH	\$199
1/8" DELUXE NYLON 2 SHORTY SUIT	\$ 69



Central Skindivers

2608 Merrick Road, Bellmore, NY 11710

• (516) 826-8888 • Open 7 days

160-09 Jamaica Ave., Jamaica, NY 11432

(718) 739-5772 • Open 6 days

Minutes from Manhattan and Kennedy Airport

Use and operation of life support equipment should not be undertaken
without qualified and proper instructions in their use. This ad does
not imply the sale of life support equipment through the mail.



ACTIVE WEAR

The multi-use Antron® Lycra® suit
—perfect for cold-water insulation
warm-water dives and stylish beach wear!

New & Improved

- Front zipper adds more style & makes the suit easier to get on & off
- Thicker nylon material will hold up longer & makes it nontransparent
- More colors for more selection
- More sizes for a better fit

Active Wear is a lightweight, skin tight, four-way stretch action suit that can be worn as a warm-water dive suit or a cold-water insulation under regular suits. They allow ease of entry into wetsuits. Comfortable & colorfast, they drape body contours & will keep their shape indefinitely. They provide protection from coral cuts, jellyfish stings, chafing, wind & abrasions. Neutral in buoyancy, they come with a high collar, stirrup & thumb tabs in the sleeves.

ONLY \$4995
\$44.95 for 2 or more!

MAIL TO: Black Bart's, 24882 Mulholland, El Toro, CA 92630

Name _____

Address _____

City, State, ZIP _____

Order Toll-Free
1-800-367-7776
(In California, after 10 am)
1-800-348-8379
(Outside California, after 8 am CA time)
Please have your VISA or MasterCard ready

Use our easy order form!

Antron® Lycra® is a registered trademark of E.I. DuPont

1. CHOOSE YOUR SIZE

Size 8-10 4'8"-5'2" 70-100lbs	Size 10-12 4'10"-5'4" 90-120lbs	Size 12-14 5'0"-5'6" 110-140lbs	Size 14-16 5'2"-5'8" 130-160lbs
Size 16-18 5'4"-5'10" 150-190lbs	Size 18-20 5'6"-6'0" 170-200lbs	Size 20-22 5'8"-6'2" 190-220lbs	Size 22-24 5'10"-6'4" 210-240lbs

2. CHOOSE YOUR COLOR

Royal Blue with Yellow Stripe	Pink with Royal Blue Stripe	Black with Royal Blue Stripe	Navy Blue with Red Stripe	Lavender with Pink Stripe
-------------------------------	-----------------------------	------------------------------	---------------------------	---------------------------

3. Send check or M.O.

TAX (CA residents must add 6%)	
Shipping/Handling	\$2.00
TOTAL	

BLACK BART'S
AQUATICS

circle #245 on Reader Service Card

GET WRECK IN MIAMI

THE WRECK DIVING CAPITAL OF THE WORLD

- Over 30 major wreck sites
- Bimini trips • Reef dives • Nite dives
- Hotel/dive packages

For color brochure call or write:

**PISCES DIVERS • 1290 5th St.
Miami Beach, Florida 33139
(305) 534-7710
1-800-537-DIVE**

circle #246 on Reader Service Card



DIVE BVI

Dive the Wreck of the Rhone, Mosquito Rock, Chikuzen, and much, much more!

8 day 7 night packages
5 2 tank dives
from **\$369⁰⁰** p.p.
LEVERICK BAY
North Sound, Virgin Gorda
British Virgin Islands

Call toll free
1-800-387-4964
In Virgin Gorda call
(809) 495-5513

circle #247 on Reader Service Card

Explore the Wonders of the Underwater World

every month with skin diver

TRI STATE CAMERA

160 Broadway, New York, NY 10038 1-212-349-2555 • Hrs: Open Sun. 10-4, Mon.-Thurs. 9-6, Fri. 9-2

VISA, MC ORDERS CALL TOLL FREE 1-800-221-1926

NIKONOS

NIKONOS V w/35 2.5\$414.95

NIKONOS V BODY336.00

NIKON U/W CAMERA179.95

15/2.8 w/FINDER1,099.95

20/2.8395.95 28/3.5222.95

28/2.8159.95 80/4.0221.95

CLOSE-UP LENS SET134.95

SB 102 OUTFIT619.95

SB 103 OUTFIT309.95

TTL SYNC CORD59.95

TTL SYNC CORD (LAND)58.95

NIKONOS V CASE25.00

NIKONOS HANDBOOK19.95

FREE LYCRA SKINS SUIT
WITH PURCHASE OF NIKONOS V

Capsule 8

- * 2 hr. recording
- * Tested at 250 ft.
- * All metal housing
- * Compact
- * Lightweight

World's smallest underwater video system! The SONY Handycam 8mm video camcorder and the Capsule 8 aluminum underwater housing features an ultra wide-angle lens, U/W microphone, shoe mount for a NIKONOS Camera adapter and 2 shoe mounts for U/W lights! Call for our low price!

AQUATICA 3.....\$1,459.95
for CANON F-1 or NIKON F-3 in stock

SEA & SEA NIKONOS ACCESS.

17/3.5.....\$418.95

20/3.5.....318.95

SWC 16 CONVERTER.....188.95

Extension Tubes—1,2,3.....@59.00

MOTOR MARINE 35.....199.95

24mm Lens.....155.95

Macro Lens.....58.95

ALL ACC IN STOCK.....CALL

OLYMPUS U/W CAMERA149.95

CANON

AS-6 BASIC.....\$125.00

AS-6 W/ACC.....CALL

circle #251 on Reader Service Card

ACHILLES SK-140

Donning and doffing dive equipment proved to be no more of a problem on this boat than any of the others reviewed to date. However, on any dive boat, even the large charter boats, it helps to keep your gear organized and together. Water entries and exits were performed easily from the SK-140, but divers doing back rolls over the aft tubes should be careful to keep any dangling equipment clear of the lifelines.

Bigger doesn't always mean better. The Achilles SK-140 is a really nice size boat for the majority of trips where two to four divers want to go a moderate distance with a lot of equipment. The SK-140's smaller size and light weight increase its portability and versatility and decrease the amount of space required for storage. Also, a smaller boat can result in lower purchase and maintenance costs without a sacrifice in quality. With a retail price of \$3,020, the Achilles SK-140 deserves the attention of any serious inflatable boat shopper. You don't have to be a commando to appreciate this little trooper.

AQUAVIDEO

(Continued from Page 36)

will fit just beneath the rear coverplate.

AquaVideo also has a complete line of U/W video/cine lights. For the budget minded user, the Mini-Nova compact lights have bulbs ranging from 20 to 100 watts, with burn times ranging from 79 to 16 minutes. For those who want professional quality lighting, the Supernova systems offer between 350 and 700 watts. For some Supernova systems, the battery is in a separate case.

Because we already have a 10 inch diameter AquaVideo housing for a video camera and VCR for standard VHS tape cassettes, and a Mini-Nova video light, we were anxious to try a smaller six inch diameter housing for a Pentax 8mm camcorder. Our impressions were favorable: The compact housing was easy to carry and handle topside and underwater. Buoyancy was close to neutral but could vary slightly with the addition of U/W lights. The stability was excellent. We could let go of the camera housing for a few seconds without having it rise or sink quickly. Because each camera/housing combination will have a different U/W balance, however, you may wish to use tiny lead weights to fine tune the buoyancy. The two-thirds inch (diagonal) electronic viewfinder of the camera used was admittedly small and hard to see, but we quickly adjusted to a combination of looking at the viewfinder and sighting just over the top of the camera housing. We weren't able to add a larger auxiliary

viewfinder to the system during this test, but would recommend one.

Because so many camcorders are available, you may have to send yours to AquaVideo to have it custom fit to the U/W housing. Call or check the current price sheet to find out if this is necessary. Personally, we like this option because it assures us everything will fit. (For those in the market for a camcorder, AquaVideo's literature will indicate a current recommendation for the most appropriate in each format.)

For more information write directly to AquaVideo, Inc., 5065 NW 159th St., Miami, FL 33014; (305) 621-0222. Ask for the free price sheet. For the Underwater Equipment Selection Guide, send \$4; and for an Underwater Demonstration Tape, send \$17.

SCHOLARSHIP WINNERS/PADI

This year, in support of the Our World Underwater Scholarship program, PADI and PADI International College have made a special offer to all of the 1987 scholarship winners.

The primary scholarship recipient, 20 year old Michael Topolovac of Del Mar, California, has been offered a full instructor-training program at PADI International College. This includes a seven day development course and two day test, as well as a preparatory course (rescue diver and divemaster certification) should the recipient need this prerequisite training. The offer also includes accommodations at the PADI International College housing facility and a daily budget for living expenses while attending the program.

The two other scholars, 23 year old Wesley "Rocky" Strong of Charlotte, North Carolina and 21 year old Donna Schroeder of Lake St. Louis, Missouri, have also been offered the seven day instructor development course and two day instructor examination.

THORNE JOINS HALL'S

Hall's Diving Center and Career Institute in the Florida Keys has added Banny Thorne to its staff. Hall's has been operating daily trips to the reef for divers in the Middle Keys area for more than 14 years. At the present time the range is about 40 miles with reef and wreck locations on both sides of the islands.

Thorne has considerable experience as a passenger vessel operator. He will be in charge of operations, maintenance and locating and plotting new wrecks and reefs. With the addition of Thorne, Hall's will be able to expand even more on its locations and generally improve on the quality of trip services. Thorne can be contacted at Hall's Diving Center and Career Institute, 1994 Overseas Highway, Marathon, Florida Keys 33050; (305) 743-5929; out of state (800) 331-HALL.

SUN. 9:30-6
PHONE ORDERS ACCEPTED DAY OR NIGHT
MON.-THURS. TILL 9:30 PM EDT, FRI. 9-2

AD RAMA
 THE PHOTOGRAPHY PEOPLE
 42 WEST 18TH STREET
 NEW YORK, N.Y. 10011
 (212) 741-0052

UNDERWATER



NIKONOS V UNDERWATER SYSTEM

FREE NIKON UW PHOTOGRAPHY TECHNIQUES W/PURCHASE OF NIKON OUTFIT

*Nikonos V 324.95

*RECEIVE FREELY CYCLO DIVING SKINS FROM MFR. W/NIKONOS

BODY PURCHASE - CALL 1/EXP

Action Touch f/UW Snorkling and Above Water 176.95

15/28UW 949.95 28/2.8UW 159.

20/2.8UW 409.95 35/2.5UW 98.

28/3.5 220. 80/4 UW 220.

28mm UW Finder 15.95

35 & 80mm UW Finder 17.95

DF-10 Finder 64.95

DF-11 199.95 DF-12 117.95

SB 102 w/case 168.95

SB 103 w/case 318.95

TTL Sync Cord (Land) 64.95

PC Flash Adaptor (Land) 24.95

DBI TTL Sync 99.95

DBI Bracket 114.95

DBI Bracket Set f/SB102 99.95

Ext Arm f/SB102,103 99.95

SU-101 Sensor 86.95

Sensor Holder 44.95

Close-Up Kit w/o case 136.95

Support Arm f/Close-Up 29.95

Macro Lens Set f/Nikonos 49.95

Lens Hood & Filter Holder 6.95

CC 30R Filter 18.95

Original Nikonos Case 29.95

Case f/Nikonos 19.95

O-Ring Set 6.95

Nikonos Handbook 19.95

by Jim & Cathy Church 13.95

UW Cue Cards 13.95

ACCS f/NIKONOS 209.95

Sunpak Mariner 32 269.95

Toshiba F-III TTL 96.95

Ikelite Ext Tube Set 79.95

Ikelite Official Viewfinder 79.95

SUBATEC 799.95

S-100 899.95

S-150 944.95

S-200 TTL 1129.95

S-250 TTL 249.95

Subawinder II: 17mm Nikonos Conv Lens w/Finder 44.95

PELICAN Waterproof, Unbreakable

#500 Guard Box 16.95

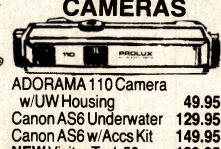
#1400 42.95

#1500 63.95

#1600 99.95

#1700 109.95

UNDERWATER CAMERAS



ADORAMA 110 Camera

w/UW Housing 49.95

Canon AS6 Underwater 129.95

Canon AS6 w/Accs Kit 149.95

NEW Vivitar Trek 50 129.95

Olym Infinity w/Lith Batt 144.95

HANIMEX Call

Hanimex Amphibian 110 169.95

Hanimex Amphib 35mm

Ikelite Substroke Kit f/Above

Includes strobe, photobag, tray, strap & handle Only 149.95

Amphib Flash (110 or 35mm) 97.95

Close-Up Lens Set f/35mm 27.95

Macro Lens f/35mm 43.95

Wide Angle Lens f/35mm 86.95

SEA & SEA

Motor Marine 35

Motor Marine 35

w/Bulk Head Conn Call

Wide Ang Lens (24mm) 150.95

Macro Lens 58.95

Close-Up Lens 37.95

YS 20M Strobe 103.95

YS 50M Strobe 213.95

Sea Grip V Tray & Handle 70.95

Sea Arm II 91.95

Sea Arm III 87.95

UNDERWATER ACCS Call

Sekonic L164B Meter 119.95

L158 w/Housing 49.95

L188 w/Housing 59.95

Eumig Nautica Underwater

Super 8 Movie Camera 199.95

Sima Sports Pouch 19.95

Pelican UW Flashlight 9.95

SEA & SEA / NIKONOS ACCS

17/3.5 Lens w/case 424.95

NEW 20/3.5 w/Cs 284.95

Viewfinder f/above 64.95

NEW 16/5.6 Conv Lens 189.95

24mm Lens Kit 164.95

YS-100 TTL 369.95

YS-150 TTL Kit 474.95

Ext Tubes 1,2,3 @ 56.95

UR-PRO

UW COLOR CORRECTION FILTER

48mm f/Hanimex 44.95

49mm, 52mm @ 44.95

58mm f/Nik 28,35,80 44.95

67mm f/Nikonos 20/2.8 89.95

Cyclops 133/15/2.8 179.95

CY-ST/Sony Handycam 59.95

ikelite

DISC CAMERA PACKAGE

Includes: Disc Camera w/Housing, Water Correction Lens &



Sports Finder, Substroke S, Disc

Close-Up, Travel Case & Underwater Disc Photography Guide

All For Only 219.95

CAMERA HOUSINGS

f/Kodak Disc Cameras 59.95

f/Most SLRs w/Sup Eye 269.95

f/Most SLRs w/o Sup Eye 229.95

f/Maxum Cameras 269.95

f/Nikon N2000/N2020 269.95

UW AF CAMERA OUTFITS

Minolta Maxum 7000 w/50/1.7

AF & Ikelite Housing 649.95

VIDEO HOUSINGS

f/JVC GR-C7U 539.95

f/Nikon VN-800 539.95

f/Olympus VX-801 539.95

f/Sony CCD-M8U 229.95

f/Sony CCD-M8U w/WA 213.95

UW Video WA Lens 184.95

UW Video Fisheye Lens 109.95

UW Video Lite 189.95

Other Vid & CCD Housings Call

FLASH UNIT & ACCS

Substroke Sw/Arm 99.95

Substroke M 99.95

Substroke MS 113.95

Substroke MV 129.95

Substroke 100 279.95

Substroke 150 w/Nicad 399.95

Substroke 150 D 324.95

Substroke 225 w/Nicad 439.95

WATCHES & COMPASS

DDL-1000 Digital Timer 89.95

NEW DDL-2000 Bk 114.95

Pro Compass (Wrist) 22.95

Pro S Compass (Wrist) 31.95

DIVING LIGHTS

Mini C Halogen Lite 21.95

Modular H Lite 46.95

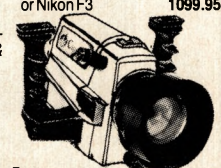
Modular Super Lite 194.95

Other Ikelite Accs Call

TOLL FREE OUT OF STATE
800-223-2500
 HAWAII & ALASKA
 800-232-7662

Aqua Vision

Aquatica 31/Canon F1 New or Nikon F3 1099.95



Ports and Gears Call

Capsule 8 689.95

Capsule 8 w/Cs (Pack A) 829.95

Sony Handycam w/Cap 8 1499.95

AQUA VIDEO UW

f/Sony CCD-V3

w/H.R. Lens Pack 899.95

For Other Units Call

ewa-marine

MASTER SERIES

U-F w/Winder 71.95

U-FXP Winder & Strobe 76.95

U-FX Zoom & Flash 87.95

U-FPN Zoom, Flash, Mtr 87.95

U-FGM w/Tail Strobe 79.95

U-FZL Medium Zoom 79.95

U-FZL Long Zoom 79.95

U-AL f/Disc 27.95

U-AFM Autofocus 28.95

UND Sup-8 Movie Cam 59.95

SL Sup-8 Bolex Mov Cam 59.95

U-H Md Fmt Cameras 87.95

Housing f/Nikon VN-800,

Olympus VX801

Housing f/Panasonic PV-300,

Olympus VX403 139.95

Housing f/Camcorders 139.95

Hsn'g f/Sony 8mm Hindy 139.95

WATERPROOF BINOCULARS

NITROGEN SEALED & FOG PROOF

Nikon 7x50 IF 269.95

Nikon 8x30 209.95

Kodak

SLIDE FILM w/o Kodak proc.

KM(25) 135-36 4.59 7.65

KR(64) 135-36 4.55 7.55

KR(64) 135-24 2.65 5.00

EN(100) 135-24 3.39 5.74

EN(100) 135-36 4.40 7.50

ET(160) 135-36 6.29 9.39

ED(200) 135-24 4.19 6.54

ED(200) 135-36 4.95 8.09

EL(400) 135-24 4.80 7.15

EL(400) 135-36 5.09 8.24

PROFESSIONAL FILM

PKR(64) 135-36 5.29 8.39

PKL(200) 135-36 6.89 9.99

FUJICHROME

SLIDE FILM w/o Kodak proc.

RF(50) 135-36 3.89 6.49

RD(100) 135-36 3.99 6.49

For honest answers about commercial diver training call —FREE—
800-654-3483
 in NY 800-847-8989

Commercial Diving Institute

151-19 POWELLS COVE BLVD. □ WHITESTONE, NY 11357

LEARN AT THE HELM

From courses for the novice to professional training programs.

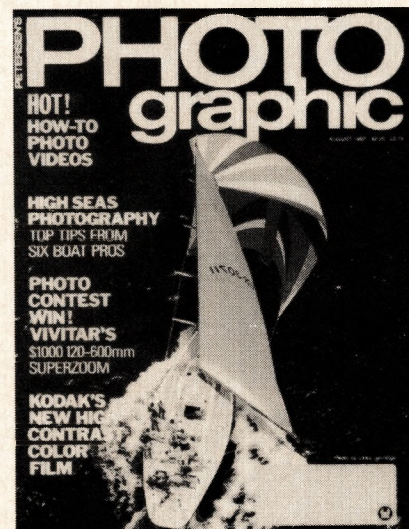
FREE INFORMATION KIT
800-225-2841

In Fla. 305-283-8130

Chapman
 SCHOOL OF SEAMANSHIP

Where dreams become reality.
 Stuart, Florida

Get the Picture?



PETERSEN'S

PHOTO graphic

The best
"How-to" photography magazine
available on the newsstand!

- Tips from Experts
- User Reports
- Photo Contest
- Video News

NOW ON SALE
AT YOUR
LOCAL
NEWSSTAND

 **PETERSEN**
We Build Magazines Right

DIVER'S DIRECTORY



ALABAMA

MCWHORTER ENGINEERING CO. 205/836-2814
P.O. Box 9014, Plant 1053, Gadsden Rd., Birmingham, AL 35213
Rebuilds, parts, accessories, ASME coded.
HP air compressors, units, systems, since 1952.

ARIZONA

BLUE WATER ADVENTURES, INC. 602/645-3087
P.O. Box 3802, Page, Arizona 86040
Specializing in custom boat tours of Lake Powell,
max. 6 divers, SSI inst., rentals, air, sales.

ARKANSAS

RICK'S PRO DIVE N SKI SHOP, INC. 501/753-6004
2323 N. Poplar St., N. Little Rock, AR 72114
501/753-6060
PADI Five Star Instructor Development Center w/Indoor Pool
Dive Charters, 2 Cust. Dv. Boats—We teach 11 PADI Specialties.

CALIFORNIA

AQUARIUS DIVE SHOP 408/375-1933 or 375-6605
2240 Del Monte Ave., Monterey, CA 93940 (or)
32 Cannery Row, Unit 4, Monterey, CA. Guided Underwater Tours.
Specialize in U/W Photo. & trips. "Pacificaly The Finest."

ARGO DIVING SERVICES 213/510-2208
314 Metropole, P.O. Box 1201, Avalon, CA 90704
Guided underwater tours and instruction by
Jon Hardy on Catalina Island. Free information.

BLUE DOLPHIN HOUSE—Catalina Island 213/510-1811
603 Beacon St., P.O. Box 2605, Avalon, CA 90704
2 bdrm. vacation rentals w/kitchen, cater to divers.
Boardsailing, diving instruction, sales, rentals, air.

CATALINA DIVERS SUPPLY 213/510-0330
Avalon, Santa Catalina Island, CA 90704
Rentals, sales, air. 3 locations: Pleasure Pier,
Avalon Underwater Park, Lover's Cove.

CATALINA UNDERWATER CONNECTION 714/661-0320
P.O. Box 135, Dana Point, CA 92629
Custom boat charters. Guided U/W tours, 6 divers max. Rentals.
PADI instructors. Multi-day hotel dive packages.

DIVER'S WORLD 213/450-6425
3127 Lincoln Blvd., Santa Monica, CA 90405
10-7 Daily. All services plus charter trips! NAUI & PADI Pro
Facility. For Everything In The World Of Diving!

GUCCIONE'S SCUBA HABITAT 714/594-7927
3220 Brea Canyon Rd., Diamond Bar, CA 91765
PADI 5 Star instr. develop. center. Family owned & operated.
'See Vue' & 'Atlantis' dive boats. 32' Radon for small groups.

MARINA DEL REY DIVERS 213/827-1131
2539 Lincoln Blvd., Marina Del Rey, CA 90921
Open 7 days, boat trips, rentals, sales, instruction in
all levels. We serve Margaritas!

PASADENA DIVERS WEST 818/796-4287
2695-A E. Foothill Bl., Pasadena, CA 91107
Sales, service, air, PADI, NAUI, instruction.
Rentals, boat trips, underwater photography, tours.

SCUBA DISCOVERIES 415/394-6555
651 Howard Street, San Francisco, CA 94105
Rentals-Sales-Air-PADI-Local & Foreign Dive Trips
Instruction.

SCUBA DUBA DIVE 818/881-4545
7126 Reseda Bl., Reseda, CA 91335
Mon. - Sat. 10-7. Underwater photo specialist.
Boat trips, instruction, sales, service, rentals.

SCUBA LUV 805/496-1014
704 Thousand Oaks Blvd., Thousand Oaks, CA 91360
Home of the dive boat SCUBA LUV'ER.
Specialist in California Channel Islands Diving.

TRI-VALLEY SCUBA SCHOOL, INC. 415/828-5040
21310 San Ramon Valley Bl., San Ramon, CA 94583
Scubapro Dealer & full line of major brands.
The East Bay's "full service" pro dive store.

WATER EDUCATION TRAINING (WET) 619/693-DIVE
7094 Miramar Road (at Distribution Ave.), San Diego, CA 92121
YMCA, PADI, NAUI resort courses through instructor. Free weekly
scuba refresher classes. Full service vacation facility. Get WET.

WEST COAST DIVERS SUPPLY 818/708-8136
16931 Sherman Way, Van Nuys, CA 91406
818/708-8137
Rental, Sales, Repair, Instruction, Travel Program. PADI,
NAUI and L.A. County. Hours: Monday through Saturday 10-7.

CONNECTICUT

BYRAM BAY SPORTS, INC. 203/853-1005
606 West Avenue, Norwalk, CT 06850
Fills, Rentals, Trips, Repairs & Sales.
Area's most Comprehensive year-round scuba school.

CENTRAL SALES SCUBA 203/283-5007
136 Carter Rd., Thomaston, CT 06787 Ken Mischo, owner
Connecticut's most affordable dive shop. \$1 air fills.
Classes, rentals, hydros, trips, repairs, used gear.

MULTITECH MARINE SWIM & SCUBA CENTER, INC. 203/739-9596
180 Flanders Rd., Niantic, CT 06357
Sales, svcs., rentals, travel, classes, activities. PADI 5 Star
facil., Scubapro, Tekna, TUSA, UK, Ikelite, SAS, Nikon, Parkway.

ORBIT MARINE SPORTS CENTER, INC. Open all year!
3273 Fairfield Ave., Bridgeport, CT 06605
Foot of Broad St., Stratford, CT 06497 203/377-6969
Sales, rentals, air, service, NAUI, PADI instr., charters.

SEAVIEW SCUBA, INC. 203/442-7279
50, Rt. 32, Quaker Hill, CT 06375 (3.5 mi. N. of Coast Guard
Academy on Waterford/Montville line.) 3 full-time PADI inst.
Dacor-Henderson-Heuer-Seatec-Tekna-UK. Airfills, svcs., rentals.

THE DIVING BELL, LTD. 203/775-3573
461 Federal Rd., Brookfield, CT 06804
Open all year. 5 Star PADI instruction. Specialties,
Travel, Photo, Rentals, Repairs, Gifts.

UNDERWATER SWIMMERS INC. 203/828-3641
1038 Farmington Ave., Kensington, CT 06037
Discount prices, courses, rentals, air fills,
repairs, hydros, travel, charters.

UNDERWATER SWIMMERS, INC. 203/932-0258
526 Main St., West Haven, CT 06516
Discount prices, courses, rentals, air fills,
repairs, hydros, travel, charters.

FLORIDA

AMERI DIVE 305/395-4407
7166 Beracasa Way, Boca Raton, FL 33433
Del Mar Shopping Village, corner Powerline & Palmetto.
Instr., sls., rental, svcs., air, travel, resorts, Scubapro, PADI.

AQUA SHOP 305/848-9042
505 Northlake Blvd., North Palm Beach, FL 33408
Full Svc.
Dive Shop/2 Coast Guard Chtr. bts./Daily Reef Trips/Dive Master
Prog./Drive-up Airfills/Become CG lic. Capt. &/or Instr. thru us.

BRENT FEINMAN'S SCUBA WORLD BY THE SEA 305/771-3933
4339 A Ocean Dr., Lauderdale-By-The-Sea, FL 33308 (STAY WET)
PADI 5 Star Facility, air, sales, svcs., rentals, dive charters,
beach diving. All levels of cert. Priv. & Group lessons.

CRYSTAL LODGE MOTEL & DIVE CENTER Dive Shop 904/795-6798
U.S. 19 N., P.O. Box 456, Crystal River, FL 32629 Motel 795-3171
Manatee & spring diving, boats, equipment rental.
Heated pool, seafood, bar, rooms at low prices.

DIVE MIAMI Reservations:
"Gold Diver II" Custom Dive Boat 305/672-DIVE
30 min. to Miami's 20 wrecks & reefs 800/325-1337-at
U/W photography, PADI instruction. tone dial "Dive"

DIVER'S DEN
12614 N. Kendall Dr., Miami, FL 33186 305/595-DIVE
8280 State Rd. 84, Ft. Lauderdale, FL 33324 305/473-9499
PADI 5 Star instruction, sales, service, rentals, trips, air, photo.

DIVER'S DEN/PNEUMATIC SYSTEMS, INC. FL 904/871-4777
4720 E. Bus Hwy. 98, Panama City, FL 32404 800/272-4777
Sales, rentals, service, fast charter boats, 6-15 passengers.
Instr. NAUI, PADI. Compressor sales, service, maint., overhaul.

DIVERS UNLIMITED 305/981-0156
6023 Hollywood Bl., Hollywood, FL 33024
Awarded #1 training facility by PADI. All brands, whsl/rtl, daily boat
trips, repair, rental, classes, travel. 5 Star PADI IDC training facility.

DIVERS UNLIMITED/FORT LAUDERDALE 305/524-4862
440 Seabreeze Bl., Ft. Lauderdale, FL 33316
Daily boat trips, training dives, classes, retail—all brands, leisure-wear, rentals. Packages w/Days Inn. 5 Star PADI training facility.

DIXIE DIVERS
Of Ft. Pierce, 1717 S. U.S. 1, FL 34950 305/461-4488
Of Stuart, 1843 S.E. Federal Hwy., FL 33494 305/283-5588
Of W. Palm Bch., 4348 Forest Hill Blvd., FL 33406 305/969-6688

FANTASEA SCUBA HEADQUARTERS 904/837-0732
P.O. Box 5498, #1 Hwy. 98, Destin, FL 32541 904/837-6943
PADI 5 Star instructor Development Center, D.V.I. resort, sales & service, gulf charters, instruction, rental, air, travel.

FORCE-E, 1399 N. Military Trl., W. Palm Bch., FL 305/471-2676
877 E. Palmetto Pk. Rd., Boca Raton, FL 305/368-0555
2700 E. Atlantic Blvd., Pompano Beach, FL 305/943-3483
2104 W. Oakland Park Blvd., Ft. Lauderdale, FL 305/735-6227

GINNIE SPRINGS, INC. 904/454-2202
Rt. 1, P.O. Box 153, High Springs, FL 32643 800/874-8571
Six 72° clear blue springs, camping, canoeing. Complete resort dive facility. Cavern instruction.

GOLD COAST CHARTERS, INC. 305/842-6356
113 Timber Run E., West Palm Beach, FL 33407
Palm Beach Custom diving 7 days a week. Reefs & Wrecks
We dive YOUR selected sight! 2 USCG certified dive boats.

GULF STREAM DIVER SCUBA CHARTERS 305/965-7878
2315 Caroma Lane, West Palm Beach, FL 33406
Palm Beach daily reef & wreck dives, pro charters, Bahama boat trips. 2 new USCG 38' & 41' cust. dv. boats.

HYDROSPACE DIVE SHOP 800/874-3483
3605-A Thomas Dr., Panama City Beach, FL 32407 904/234-9463
The Gulf Coasts' largest and most experienced dive service. 5 boats 46', 42', 40', 24'. Full service facility.

JIM HOLLIS' RIVER RENDEZVOUS US 800/247-3373
Route 2, Box 60, Mayo, Florida 32066 FL 800/537-3373
Lodging, restaurant, sauna, steam room, jacuzzi, & modern camping. Tubes, canoes, spring tours, rentals, 3-day YMCA Scuba Courses.

LAUDERDALE DIVER 800/654-2073; 305/GO-SCUBA
1334 S.E. 17th St., Ft. Lauderdale, FL 33316 "On the Causeway"
PADI distinguished service award—full service pro shop. Custom 42' dive boat w/complete hotel packages—training completion.

MAC'S SPORTS 813/442-9931
2126 Drew St., Clearwater, FL 33575
One of the world's largest diving & snow ski stores and school. Pool and Ski Deck on premises.

NORINE ROUSE SCUBA CLUB OF THE PALM BEACHES
4708 North Dixie Hwy., West Palm Beach, FL 33407 305/844-2466
America's only country club for divers.
Dive trips six days a week.

PANAMA CITY DIVE CENTER 800/832-DIVE
4823 Thomas Drive, Panama City Beach, FL 32407 904/235-3390
Quality sales, service, daily charters.
Scubapro, Tabata, Sherwood. NAUI and PADI.

PLANTATION INN MARINA/DIVE SHOP 904/795-5797
P.O. Box 1093, Crystal River, FL 32629
Instruction, rentals, boats, canoes, cameras, dive packages. 400 yds. to King Spring. Golf, tennis, seafood, bar, 150 rms.

PORT PARADISE RESORT 904/795-3111
P.O. Box 516, Crystal River, FL 32629 (FL) 800/443-0875
Manatee center, 43' offshore boat, dv. shop, 45 rml. boats, hotel suites overlooking springs, 2 pools, change rooms, 2 bars, food.

PROFESSIONAL DIVING SCHOOL/CHARTERS OF FLORIDA
Bahia Mar Yachting Center, Ft. Lauderdale, FL 33316
Basic-Divemaster training/specialties—night, deep, wreck, "Instructor." Daily reef & wreck dives. 305/761-3413 800/772-DIVE.

RENTALINE COMPRESSORS—Destined for those great dive sites in the tropical Caribbean? Rent a scuba compressor to take along. Miami departures to the Keys, Bahamas, Cayman Islands, etc. For information 305/557-7430.

SEAPRO SCUBA CENTER 305/844-DIVE
3619 Broadway, Riviera Beach, FL 33404
PADI 5 Star facility. Sales, service, instruction, rentals, charters, air. Action sportswear. Tekna scooter rental.

SONY SERVICE CENTER 305/920-5633
3904 N. 29th Ave., Hollywood, FL 33020
Take those U/W advent. home with you after your dive vacation! We rent Sony Video Cameras, U/W housings and accessories.

SPRING SYSTEMS DIVE CENTER 904/776-2310
Route 5, Box 171 B, Live Oak, FL 32060
1.7 miles from Peacock Springs. Dive resort and restaurant. WANTED: Manager/instructor.

TALLEY'S PRO DIVE/7 RIVERS INN 904/795-2776
744 U.S. Hwy. 19, Box 124, Crystal River, FL 32629
Package Deal \$43.43 p.p. includes: 1 day of diving, 1 night hotel room dbl. occ., tanks, weights. Learn to dive in 3 days.

THE SCUBA SHACK, INC. 305/334-8808
2485 N.E. Dixie Hwy., Jensen Beach, FL 33457
The Treasure Coast's oldest full service dive shop.
PADI instruction, air, sales, rentals, repairs, trips.

VORTEX SPRING DIVING RESORT 904/836-4979
Rt. 2, Box 18A—Hwy. 18 North—Ponce De Leon, FL 32455
Sales, service, rentals, 5,000 PSI, canoe rentals, group lodging, RV hook-ups, 50' deep spring, clear water all year, no waves.

FLORIDA KEYS

A ADMIRAL 1-65 FEET OF COMFORT AND FUN! 800/346-DIVE
P.O. Box 0113, (MM 100), Key Largo, FL 33037
Scuba/snorkel trips to Pennekamp Reefs! PADI Certification courses start daily! Group & room package plans. 305/451-1114.

A BEAUTIFUL CONDO AT MARATHON! Panoramic view, 2 br/2 ba + queen sleeper. Gourmet kitchen w/breakfast bar, cable TV, dockage, pool, close to dive shops, restaurants, shopping. Vernon Dobbins, 5110 Puritan Rd., Tampa, FL 33617. 813/985-9928

A KEY LARGO CONDO Call collect 813/939-3612
Moon Bay deluxe 2 BR, 1½ bath w/dock, sleeps 6. Near Pennekamp, dive centers, marinas and Largo cut. Scuba, snorkel, fishing, skiing, tennis. \$395 per wk. Reserve early.

A KEY LARGO WATERFRONT APARTMENT 305/451-2840
Completely furnished, limited dockage, sleeps 4. 305/920-4428
Oceanside bordering Pennekamp Park. 305/893-3898
Rent by weekend, week, or month.

A KEY WEST CANAL HOME RENTAL AND/OR DIVE/FISHIN' PKG.
P.O. Box 473, Key West, FL 33041 305/296-3737
3/2 w/full kitchen, micro., W&D, color cable TV, stereo, gas grill. Covered fish clean table w/light & water. MUCH MORE!

A LUX KEY LARGO 2BR CONDO ON WATER 412/531-8706
Sleeps 6. Boat slip, tennis, pool, saunas. Fish, dive, snorkel from dock or reefs.

A WATERFRONT DUPLEX W/DOCK 305/852-5230
Moonrise & palms on the water! 1 BR/1 BA, LR, kit., sleeps 4. Your boat steps from your door, or sample many charters or boat rentals. 15 mins. to reef, 5 mi. to Pennekamp. \$395/wk.

AMERICAN DIVING HEADQUARTERS, INC. 305/451-0037
Rt. #1, P.O. Box 274-B, Key Largo, FL 33037
SSI, PADI, NAUI. Pennekamp our specialty for 25 years. 2-7 day packages, ½ & all day trips. For res. call toll free 800/634-8464.

AQUATIC FLOATING SEA COVE MOTEL 305/289-0800
12685 Overseas Hwy., Marathon, FL 33050
Budget Rates. Summer \$19-\$39, Winter \$24-\$44 for two. Private deep harbor & ramp on Atlantic. A#1 rooms and effs.

A WATERFRONT DUPLEX 305/852-5230
Savor moonrise & palms at your 60' dock! 1 BR/1 BA, living room, kitchen, sleeps 4. Many dive charters, boat rentals & watersports in area. 5 mi. to Pennekamp. Great ambiance! \$395 per week.

BIG PINE SEA CENTER DIVE SHOP 305/872-2319
P.O. Box 515, MM 29.5 US #1, Big Pine Key, FL 33043
Dive Looe Key, #1 Reef in FL. Keys, full service shop. Dive/lodging packages, custom boats.

BUDDY'S DIVE SHOP Nat'l. 800/223-4707; FL 800/367-4707
P.O. Box 409, Islamorada, FL 33036 MM 79.5 305/664-4707
Dv. aboard our 40' 'Scuba Safari' & 34' 'Free 'n Clear'. Full/½ day trips to Alligator Reef, Eagle Wreck & Coral Gardens. Pkgs. avail.

CAPTAIN CHAMBERS CHARTERS 305/451-1805
P.O. Box 2258, Key Largo, FL 33037 MM 100 Dive Pennekamp
30' Cust. boat w/sundeck, 6 max. 1 Trip daily, family rates, brunch served, cust. dv. pkgs. avail. Rec. by Undercurrent '82.

CAPT. CORKY'S DIVERS' WORLD of Key Largo, Inc. 800/445-8231
P.O. Box 1663, Key Largo, FL 33037 MM 99.5 U.S. 1 past Wendy's
Bahamas/Pennekamp. U/W video school/rmls. PADI, NAUI, SSI, instr. Grp. rates, dv./snkl./sail, windsurf/instr. Best pkg. rates! 305/451-3200

CAPT. GREG'S SCUBA-DO 305/451-3446
P.O. Box 2237, Key Largo, FL 33037 MM 100 @ 100 Marina
Dive Pennekamp, 34' Boat. 6 max. No crowds. Personal Service. Combin. Dive & Fish Trips Avail. Pkg. Rates.

CAPT. SLATE'S ATLANTIS DIVE CENTER 800/331-DIVE
51 Garden Cove Dr., Key Largo, FL 33037 MM 106.5 305/451-1325
Dive Pennekamp on 1 of 4 cust. boats. NAUI, YMCA, PADI, CMAS. Instr., air & rentals, grp. & multi-dive disc. pkgs., gifts.

CORAL LAGOON RESORT AT THE DIVING SITE 305/289-0121
Deluxe waterfront efficiencies with private sundecks, gazebos, dockage, pool, tennis, bikes. PADI dive shop, dive packages. PADI dive shop, lessons, 3 boats, groups, spring/fall dive pkgs.

DELUXE KEY LARGO CONDO Call Collect 516/379-5059
Beautiful 2 BR, 1½ bath unit—Sleeps 6.
Near Pennekamp, Dive Shops, Boat Rentals & Shopping. Tennis Courts, Swimming Pool & Boat Ramp. \$375.00/week.

DIVE KEY WEST 305/296-3661
"Carol J", P.O. Box 2842, Key West, FL 33045
Disc. room pkg. & grp. rates. Max. 6 divers.
Lobster diving, spearfishing, rentals & air.

DIVE 7 MI REEF, Bed & Breakfast, Airport pickup, Custom Dives, Native Guides, Wreck & Night Dives, Spearfishing Family & Group Plans. All you need is a bathing suit. Tortuga Adventures, Box 671, Key West, FL 33040 305/296-7748.

DIVING & FISHING PACKAGES 3-5-7 Nights, Condos, Homes, Motel Rooms, Effs. Group & Learn to Dive Packages also available
First Realty of Marathon, Inc. Ask for Linda Jackson, Assoc. Days 305/743-6921 or Evenings 305/743-2437.

FLORIDA KEYS DIVE CENTER 305/852-4599
P.O. Box 391, Tavernier, FL 33070 6 pass. dive boats.
5-STAR facility & dive charters, 4 day instr. & specialties. Reefs, wrecks, spearfish, Pennekamp & more.

GOLDEN KEY MOTEL 305/664-4418
U.S. Rt. 1, P.O. Box 710, Islamorada, FL 33036 MM 81
Free dockage & boat ramp, waterfront cottage, rooms with stove & refrigerator, picnic & barbecue area.

HALL'S DIVING CENTER & RESORT 800/331-4255
1994 Overseas Hwy., Marathon, FL Keys 33050 (in FL) 305/743-5929
Beautiful reef & wreck diving trips—Largest store & instruction. facility in the Keys—motel/condo diving packages arranged.

HOLIDAY ISLE DIVE CENTER 305/664-4145
P.O. Box 482, Islamorada, FL 33036 MM 84.5 FL 800/432-2875
All new "Wreck Diving" US 800/327-7070
All new 22 passenger dive boat.

KELLY'S MOTEL AND MARINA 305/451-1622
P.O. Box 75, Key Largo, FL 33037 (MM 104.5)
1 mi. from John Pennekamp. In heart of divg. dist. Dv. pkgs. avail.
On the water/jacuzzi/bbq area/boat ramp/swim/fish/dock/cable/HBO.

KEY LARGO BAYFRONT HOME—Dive/Snorkel/Sail 305/255-4556
P.O. Box 161414, Miami, FL 33116
3 bedrooms/2 bath gorgeous, new lushly landscaped private home w/dock. Luxuriously furnished, fantastic rates—less than motel room.

KEY LARGO CONDO 305/433-8073
3 BR., 1½ Bath, completely furnished. 305/546-2275
Marina, saunas, tennis, pools, 2 mi. to Pennekamp Park. Great diving, fishing, sailing. Special summer rates.

KEY LARGO CONDO/DIVE-FISHING 305/251-9568
P.O. Box 160057, Miami, FL 33116
2 Bdrm/2 bath, on ocean within Pennekamp Park boundary, ramp, pool, marina facility, dock, tennis, best security. Weekly, monthly.

KEY LARGO—From studio to 3 bedroom 2½ bath apt.
Tennis, pool, dockage. Close to all dive shops & boat rentals from \$200 per week.
Call 312/357-6285.

KEY LARGO LUXURY CONDO 513/984-0866
Oleink, 8555 Blue Cut Lane, Cincinnati, OH 45243
Luxuriously decorated, 2 bedroom, dock, pool, sauna, tennis. Minutes from best dive areas.

KEY LARGO OCEANFRONT APTS. 305/852-5312 or 305/852-9383
On the ocean: Molasses, French & Conch Reefs at your front door. Large lagoon, boat ramp, minutes to diving/fishing, 2 BR. apts., kitchens, all amenities. Weekend, week or monthly rental.

KEY WEST/BANANA BOAT CHARTERS 305/296-2380
P.O. Box 2128, Key West, FL 33040 Live-aboard 50' sailing ketch. Max. 6, \$105 per person, per day. All inclusive open water or advanced open water cert. included w/7 day booking.

KEY WEST DIVER INC.—CAPT. BILLY DEANS 305/294-0660
c/o Reef Raiders Dive Shop, U.S. #1, Stock Isle, Key West, FL 33040. Dive the Sambo's, Ten Fathom Ledge, WWII wrecks, USS Wilkes-Barre. Every dive an adventure.

KEY WEST PRO DIVE SHOP, INC. 800/426-0707
1605 N. Roosevelt Blvd. #A, Key West, FL 33040 305/296-3823
Pro facility, dive packages, O/W checkouts, private instruction. Coral reef, wreck, ledge, Marquesas & nite dives.

KINGSAIL MOTEL—DIVING RESORT FL 800/423-7474
P.O. Box 986, M.M. 50.5, Marathon, FL 33050 305/743-5246
Complete dive packages, 42' dive boat, dive shop, scuba lessons, dockage, ramp, pool, complimentary coffee and much more!

LADY CYANA DIVERS 305/664-8717
P.O. Box 1157, Islamorada, FL 33036 MM 85.9 800/221-8717
26', 40' & 60' dive boats. Reefs, galleons, wrecks & The 'Eagle'. Complete pro shop, instruction, packages, photo center.

LIDDLE PROPERTY SERVICES (Out of State) 800/742-5571
10877 Overseas Highway, Marathon, FL 33050 (FL) 800/826-8957
Motel rooms, Efficiencies, One and Two Bedrooms Condo's on the Gulf and Atlantic. Dockage, swimming pool, tennis also avail.

LOOE KEY REEF RESORT & MARINA 305/872-2215
P.O. Box 509G, Ramrod Key, FL 33042 MM 27½
40' Custom Glass Bottom Dive & Snorkel Boat, Restaurant, Dive Shop, Dockage, Ramp, Pool, Tiki Bar, PADI Instruction.

PENNEKAMP PARK CONCESSION 305/451-1621
P.O. Box 1560, MM 102.5, Key Largo, FL 33037 FL 800/432-2871
The only dive shop located directly in Pennekamp. Free brochure, send 50¢ for reef chart.

PLANTATION KEY LUXURY CONDO 305/852-5748
c/o 195 N. Airport Rd., Tavernier, Florida 33070
Beautiful 1 BR condo (sleeps 4) on bay. Has everything. Boat ramp & docks. \$295/wk. May-Nov., \$350/wk. Dec-Apr.

QUIESCENCE DIVING SERVICES, INC. 305/451-2440
P.O. Box 1570, Key Largo, FL 33037 MM 103.5
Personalized charters in Key Largo National Marine Sanctuary. Limited 6 divers per boat. Instruction: SSI, PADI, & YMCA.

RENT 20' FLORIDA KEYS DIVE BOAT 305/743-0391
and stay aboard 46' furnished houseboat, color TV, A/C, sleeps 6. Dive Pennekamp, Looe Key, Alligator Reef, crystal dive water. \$795.00 week.

ROCK REEF RESORT 305/852-2401
P.O. Box 73, Key Largo, FL 33037 MM 98
Divers' Paradise, beach, jacuzzi, packages available, comfortable accommodations and comfortable prices.

SEA DWELLERS SPORTS CENTER 305/451-3640
99850 Overseas Hwy., Key Largo, FL 33037 800/451-3640
Reef trips daily to Pennekamp Underwater State Park. Dive package with Key Largo Holiday Inn.

SEAFARER RESORT MOTEL	305/852-5349
P.O. Box 185, Key Largo, FL 33037 MM 97.8 (Gulfside)	
"Fantasy Island" setting, real, sandy beach, friendly atmosphere,	
spotless rooms, effs. & apts. at best dollar value plus group rates!	
SEA HORSE MOTEL	305/743-6571
7196 Overseas Highway, Marathon, FL 33051	
Budget or waterfront rooms or efficiencies, 300' dockage	
ramp, pool, dive pkgs. Experience the American Caribbean.	
SEA QUEST OF THE FLORIDA KEYS, INC.	800/451-6PAC
21 Garden Cove Dr., P.O. Box 571, Key Largo, FL 33037	
Dive the best of Pennekamp in "6 Passenger Privacy." Enjoy	
Uncrowded Personal Svcs. on Custom Dv. Boats. In FL 305/451-4941.	
SEA TRAIL MOTEL	305/852-8001
Rt. 5, P.O. Box 91, Key Largo, FL 33037 MM 98.5	
Cable TV, air-conditioned,	
refrigerator, budget rates.	
STEPHEN FRINK PHOTOGRAPHIC, INC.	305/451-3737
P.O. Box 2720, Key Largo, FL 33037 MM 102.5	800/451-3737
Photo Tours, Instruction, Processing,	
Camera Rentals, Stock Photos, U/W Video.	
THE DIVING SITE, INC.	US 800/634-3935; FL 800/821-9155
12399 Overseas Hwy., Marathon, FL 33050 MM 53.5	
16 & 30 pass. dive boats. Daily reef trips.	305/289-1021
Charters & group rates, PADI lessons, sales, repairs, dive pkgs.	
TILDEN'S PRO DIVE SHOP	800/223-4563
4650 Overseas Highway, Marathon, FL 33050	305/743-5422
Instructor Training Facility/Full service dive shop/	
Daily reef trips or wreck dives/Dive Packages.	
TRIANGLE WATERSPORTS, INC.	305/745-BOAT
Rt. 2, P.O. Box 617, Summerland, FL 33042	305/745-2628
Cust. dv./snork. trips to Looe Key/unique Lower Key reef sites/back	
cntry explng. Spearfish/lobster/fish/sail. Avail. aboard 3 cust. boats.	

GEORGIA

DIVERS SUPPLY	912/474-6790
5208 Mercer Univ. Dr., Macon, GA 31210	
PADI Training facility. All major brands.	
Located at Exit 2 on I-475.	
DIVING WORLD USA	404/634-4354
2945 Buford Hwy., N.E., Atlanta, GA 30329	
All brands, wholesale, retail, repair, rental, trips.	
YMCA, NAUI, PADI SSI classes—recompression chamber.	
SEA LAB	404/979-9670
Five Oaks Center, 875 Oak Rd., Lawrenceville, GA 30245	
Gwinnett County's Professional Diving Facility.	
Individualized Instruction-Personal Service-Guided Trips.	

HAWAII

AARON'S DIVE SHOP	808/262-2333
602 Kailua Rd., Kailua, Oahu, HI 96734	808/261-1211
Dive with Magnum P.I.'s instructors, Hotel/Dive Packages.	
Daily dives, 4 day cert., rentals, cameras. Write for info.	
ALOHA DIVE SHOP-KOKO MARINA	808/395-5922
Koko Marina Shpg. Ctr., Honolulu, HI 96825	808/395-8882
"Diving is fun" with Jackie and her friends.	
Scuba resort cert., boats, tours, sales, rental, all cert.	
AQUATIC CHARTERS OF MAUI	808/879-0976
P.O. Box 1028, Puunene, Maui, HI 96784	808/874-0659
Daily dv. Molokini send \$29 U/W video of Maui dv. sites and	
Molokini Crater. VHS/Beta MC/Visa. PADI Instr. U/W video svcs.	
AQUATICS KAUAI	808/822-9213
733 Kuhio Hwy., Kapaa, Kauai, HI 96746	
Full service, PADI, NAUI, SSI, U/W video taping & photo.	
Custom packages & tours aboard our 38' Wilson.	
CENTRAL PACIFIC DIVERS	800/551-6767
780 Front St., Lahaina, Maui, HI 96761	808/661-8718
Maui's most popular dive operator for over 15 years. 2 & 3	
tank dives. Two 43' boats. Very experienced staff. Classes.	
DIVE KAUAI	808/822-0452
976 Kuhio Hwy., Kapaa, Kauai, Hawaii 96746	
Kauai's only PADI 5 Star. Sales, rentals, 3-5 day certs.	
Personalized instr., small pers. charters, indiv./grp. pkgs.	
DIVE MAKAI CHARTERS	808/329-2025
P.O. Box 2955 S, Kailua-Kona, HI 96745	
Diving with a difference—we care! Write to Tom & Lisa.	
Rated Kona's best every year since '76 by Undercurrent.	
DIVE MAUI INC.	808/667-2080 or 661-4363
Lahaina Market Pl., Lahainaluna Rd., Lahaina, Maui, HI 96761	
3 six passenger boats daily to Lanai, Maui, Molokini.	
Instruction, open water check outs, photography. Pkgs. avail.	
ELITE DIVES HAWAII	808/637-9331
Suite 158, 377 Keahole St. #6, Honolulu, HI 96825	
Experience Oahu's best sites: 30' custom boat, instructor guides,	
excellent gear, small groups, relaxed pace, personal attention.	
FATHOM FIVE DIVERS/KAUAI	800/422-DIVE
P.O. Box 907, Koloa, Kauai, HI 96756	808/742-6991
Specializing in small personal charters, daily trips.	
NAUI and PADI instruction, air, rentals, photography.	

GOLD COAST DIVERS	800/367-8047 ext. 458
75-5660 Palani Rd., #P-1, Kailua-Kona, HI 96740	808/329-1328
Daily personalized dive tours. Specialty charters & classes.	
PADI 5 Star Facility. Pkg. info. for individuals or groups.	
HAWAIIAN WATERCOLORS	808/879-3584
P.O. Box 616, Kihei, Maui, HI 96753	
Experts in dive charters, U/W video, U/W photography.	
Contact Ed Robinson for information.	
KOHALA DIVERS, LTD.	808/882-7774
P.O. Box 4935, Kawaihae Shopping Ctr., Kawaihae, HI 96743	
Professional Full Service Diving Center.	
Finest diving in the United States.	
KONA COAST DIVERS	808/329-8802
75-5614 Palani Rd., Kailua-Kona, HI 96740	800/KOA-DIVE
Hawaii's only Professional Full Service Dive Center.	
Rated #1 by Pro's; Charters, Air, Rentals, Pkg. Dive Trips.	
LAHAINA DIVERS, INC.	800/367-8047 ext. 102
710 Front St., Lahaina, Maui, HI 96761	808/667-7496
Dive aboard the 43' RELIANT, with our friendly/professional	
staff. Maui's only PADI 5 Star IDC.	
LEEWARD DIVE CENTER	808/696-3414
87-066 Farrington Highway, Waianae, HI 96792	
Boat dives—featuring the "Mahi" (WWII minesweeper)	
and night dives, instruction & intro. dives.	
MAUI DIVE SHOP	808/879-3388
Azeka Place—Kihei & Lahaina Cannery—Lahaina	
2 Locations on Maui, 5 day class, beginners lessons.	
Sales, rentals, air, free dive map, PADI 5 Star.	
MIKE SEVERNS SCUBA DIVING	808/879-6596
P.O. Box 627, Kihei, Maui, HI 96753	
Personalized diving for the comfortable, experienced diver.	
Two to six certified divers only. Contact Mike Severns.	
OCEAN ACTIVITIES CENTER	800/367-8047 ext. 448
3750 Wailea Alanui, D-2, Wailea, HI 96753	808/879-4485
First Class Twin Diesel Dive Boat/Maximum 12 passengers.	
Daily dives to Molokini, La Perouse, Kahoolawe, Lanai.	
OCEAN ADVENTURES, INC.	808/487-9060
98-406, Kam. Hwy., Pearl City, HI 96782	
PADI 5 Star instructor development center, diver vehicles, tours,	
group pkgs., boat dives, cameras, 3/4 day certs.	
SANDWICH ISLE DIVERS	808/329-9188
76-6131 Plumeria Rd., Kailua-Kona, HI 96740	
Daily boat charters, maximum 6 divers, night dives, PADI classes.	
Packages, combo fish/dive charters avail. Undercurrents choice.	
SCUBA SCHOOLS OF KONA	800/445-2163
74425 Kealahou Parkway #7, Kailua-Kona, HI 96740	808/329-2661
Full PADI/NAUI Pro Facility, personalized 6 pac bts., cert., sales,	
svc., rmtls., & air. Beachwear. Htl./condo, car & dv. pkgs. Start \$449.	
SCUBA SCHOOLS OF MAUI	800/445-2163
1000 Limahana Place, Lahaina, Maui, HI 96761	808/661-8036
Full PADI/NAUI Pro Facility, personalized 6 pac bts., cert., sales,	
svc., rmtls., & air. Beachwear. Htl./condo, car & dv. pkgs. Start \$449.	
SEA DREAMS HAWAII (Bob Curran)	808/329-8744
P.O. Box 4886, Kailua-Kona, HI 96745	808/322-6118
Owner operator, 1/2 and full day, night dives & private charters.	
New power Catamaran. Recomm. by Undercurrent. PADI & NAUI.	
SEA PARADISE, SCUBA	800/322-KONA
P.O. Box 5655, Kailua-Kona, HI 96745	808/322-2500
Kona's finest dive charters—Over 50 dive sites.	
"Diving has never been easier." PADI & NAUI.	
SEA SAGE DIVING CENTER	808/822-3841
4-1378 Kuhio Hwy., Kapaa, Kauai, HI 96746	
Safely serving Kauai since 1973. Complete pro facility.	
Boat/shore trips. Accommodation pkgs. available.	
SOUTH SEAS AQUATICS	808/538-3854
1050 Ala Moana Bl., Honolulu, HI 96814	808/538-3856
Dive the Mahi, 165' shipwreck and lava tubes! Daily boat charters.	
Full service pro dive store since 1961. Write for free brochure.	
THE DIVE SHOP OF KIHAI LTD.	808/879-5172
1975 S. Kihei Rd., Kihei, Maui, HI 96753	
Daily Dive & Snorkel trips to Molokini Crater, 4-5 day	
Scuba Classes, Windsurfing, Sailing, rentals, full service.	
TOUR MASTER ASSOCIATES (Call Collect)	615/482-1645
100 Caldwell Drive, Oak Ridge, TN 37830	
Individual & group packages—Maui, Kona, Kauai. Oceanfront condos/	
boat & beach diving. Commission and tour leader allowances.	
WAIKIKI DIVING CENTER	808/955-5151
1734 Kalakaua Ave., Honolulu, HI 96826	
Waikiki's only pro dive shop. PADI & NAUI facility. Boat &	
beach dives, 3 day cert., charters, free brochure.	

ILLINOIS

SCUBA EMPORIUM	312/389-9410
12003 South Cicero Ave., Alsip, IL 60658	
PADI 5 Star Instructor Development Center.	
Heated pool on location. Full service training facility.	
UNDERSEAS SCUBA CENTER, INC.	312/833-8383
611 North Addison Rd., Villa Park, IL 60181	
Instruction, sales, service, rentals, trips and photo.	
PADI 5 Star Instructor Development Center.	

LOUISIANA

SEA HORSE DIVING ACADEMY, INC.	504/246-6523
5400 Crowder Blvd., Unit "E", New Orleans, LA 70127	
PADI 5 Star Instructor Development Center, quality	
instruction, equipment, service and dive travel.	

MAINE

AQUA CITY SCUBA, INC.	207/873-0266
11 Water St., Waterville, ME 04901	
Sales, in-shop repair service, rentals, NAUI & PADI	
training facility. Central Maine's largest dive shop.	
TOMMY'S DIVE SHOP	207/772-5357
273 Congress St., Portland, ME 04101	
North East's largest, known coast to coast, discount of 25-50% off	
everyday. Wreck charters, cut this ad out for free airfill.	

MARYLAND

BETHANY WATER SPORTS	301/461-DIVE
3220 Corporate Ct., Ste. G, Ellicott City, MD 21043	
The complete, professional diving center. Authorized Scubapro	
dealer. Instruction by certified professionals.	
DIVERS DEN, INC.	301/668-6866
8105 Harford Rd., Baltimore, MD 21234-5776	
Maryland's oldest professional dive shop.	
Large enough to serve you—Small enough to know you.	
PARKS DIVING SUPPLY	301/655-8744
8027 Liberty Road, Baltimore, MD 21207	
New Program: COMMERCIAL DIVING APPRENTICESHIP \$200.00	
Send today for free no obligation brochure.	
TIDEWATER AQUATICS	301/268-1992
1315 Forest Dr., P.O. Box 3361, Annapolis, MD 21403	
Full service dive store & authorized Scubapro dealer.	
Ocean City, MD wreck diving charter service.	

MASSACHUSETTS

AQUARIUS DIVING CENTER, INC.	617/759-DIVE
3239 Cranberry Hwy., Buzzards Bay, MA 02532	
Authorized Scubapro dealer. PADI instruction.	
Air, sales, full service, rental, dive travel.	
CAPE COD DIVERS, INC.	617/432-9035
815 Main St., Harwich Port, MA 02646	MA 800/DIVING-1
Sales, service, air, professional instruction. Open year-round.	
2 USCG approved diveboats and captains.	
MERRIMACK AQUATIC CENTER	617/688-6566
171 Merrimack St., Route 110, Methuen, MA 01844	
(Exit 46 off Route 495) Full service store, DUI drysuits.	
Authorized Scubapro dealer.	
NORTHEAST SCUBA	617/777-DIVE
125 Liberty St., Danvers, MA 01923	
PADI 5 Star IDC, Instruction, Rentals, Sales, Repair,	
Boat Charters, Int'l Dive Travel, Photo Courses, Indoor Pool!	
UNDERSEA DIVERS, INC.	617-927-9551
42 Water St., Beverly, MA 01915	
Sales, Instruction, Air, Rentals, Service, Boat Dives,	
U/W Photo Specialists.	

MICHIGAN

DIVE MORE THAN 80 SHIPWRECKS IN THUNDER BAY-Alpena, MI	
"Protected bottomlands *marked wrecks for diving convenience *	
For more information, call 517/354-4181, MI 800/582-1906	
Alpena Chamber of Commerce, P.O. Box 65, Alpena, MI 49707	
DIVER'S DEN	313/693-9801
604 S. Lapeer Rd., Lake Orion, MI 48035	
Sales, service, rentals, air, instruction.	
Great Lake Charter Specialists.	
SCUBA NORTH, INC.	616/947-2520
13258 W. Bayshore Dr., Traverse City, MI 49684	
Year-round instruction, dive trips, local charters,	
rentals, repairs & hydro's, all major brands, pkg. prices.	

MISSOURI

WEST END DIVING CENTERS, INC.	
11215 Natural Bridge Rd., Bridgeton, MO 63044	314/731-5003
11004 Manchester Rd., St. Louis, MO 63122	314-822-3005
39 N. Allen, Bonne Terre, MO 63628	314/358-5000
WEST END DIVING'S—BILLION GALLON LAKE RESORT	
at Bonne Terre Mine, Bonne Terre, MO 63628	Dive
Fully illuminated underground lake, 1 hour from	reservations
St. Louis. 70 ft. visibility, 58° water temp.	314/731-5003

NEW HAMPSHIRE

North Country Scuba & Windsurfing, Inc. 603/569-2120 or 524-8606
Main St., Wolfeboro, NH 03894; 334 Union Ave., Laconia, NH 03246
NASDS, air, rental, service, sale, 30' dive boat on Lake
Winnepesaukee, getaway weekday and weekend packages.

NEW JERSEY

CEDAR GROVE DIVERS SUPPLY 201/857-1748
492 Pompton Ave., Rd. 23, Cedar Grove, NJ 07009
National certified instruction, private or group lessons.
Indoor heated pool, full service dive shop.

EAST COAST DIVING SERVICE, INC. 201/591-9374
Spring Valley & Texas Rds., Morganville, NJ 07751
NJ's 1st PADI "5" Star training & travel facility. Sales, repairs,
air, rentals, trips, full photo. Just off Rts. 9 & 18.

MARLIN SCUBA SHOP 201/327-6000
506 Rt. 17, Ramsey, NJ 07446
Full service PADI training facility.
Indoor heated pool, N.J. wreck dives, dive vacations.

PRINCETON AQUA SPORTS 609/924-4240
306 Alexander St., Princeton, NJ 08540
PADI training facility. Full service dive, snow
ski & windsurfing facilities. Diving vacations our specialty.

SKI and SCUBA SPORTS, INCORPORATED 201/666-1323
32 Westwood Ave., Westwood, NJ 07675. New Jersey's
Premier Full Service Dive Shop. PADI, NAUI, SSI, CMAS,
YMCA. Unique Celebrity Dive Vacations and Club Discounts.

UNDERWATER DISCOVERY, INC. 201/270-9100
2722 Rt. 37 East, Toms River, NJ 08753
Owned and operated by ex-Navy/Commercial Divers.
Locations in: Toms River, St. Lucia, and Grenada.

UNDERWATER SPORTS, INC. 201/843-3340
Rt. 17 S., Rochelle Park, NJ 07662
New Jersey's oldest and largest pro dive shop est. 1955.
Indoor heated pool, nat'l. certification, travel, all svcs.

WHITEHOUSE AQUATIC CENTER 201/534-4090
Box 97-C, Hwy. #22 West, Whitehouse Station, NJ 08889
Equipment Sales, Service, Rentals, Air.
Private and Group Lessons. Dive Vacations, Wreck Dives.

NEW YORK

AA AQUA-LUNG CENTER, RICHARDS 212/947-5018
233 W. 42nd St., Times Square, New York, NY 10036
Export agent for all major brands. Dive, surf, swim.
Largest all year-round dive shop. Will not be undersold.

ALLEN SPORT SHOP 914/235-3430
249 North Ave., New Rochelle, NY 10801
Air, rentals, instruction, repairs, hydro, V.I.P., fishing equip.
7 days—Every major prof. dive manuf. discounted. Our 65th year.

AQUA CRAZY HARVEY 718/743-0054
3179 Emmons Ave., Brooklyn, NY 11235
At Sheephead Bay. Instant refills. Hydro-VIP.
Major brands, big discounts. Since 1953.

EAST COAST DIVING, INC. 718/979-6056
1500 Hylan Blvd., Staten Island, NY 10305
PADI 5 star facility. Superior Instruction & Equipment.
Personal Dive Trip Planning & Local Wreck Charters.

ISLAND SCUBA CENTERS, INC. 516/546-2030
74 Woodcliff Ave., Freeport, NY 11520
Sales, air, rentals, repairs, waterfront store, travel.
Instruction, photo equip., rentals, Club Aquarius.

KINGS COUNTY DIVERS CORP. 718/648-4232
2417 Avenue U, Brooklyn, NY 11229
Authorized Scubapro dealer. 718/934-4153
Brooklyn's full service pro shop.

NIAGARA SCUBA SPORTS 716/875-6528
2048 Niagara St. (near I-190 & Hertel), Buffalo, NY 14207
Western New York's full service pro dive shop.
PADI 5 Star facility. Scubapro & other major brands.

PAN AQUA DIVING 212/496-2267
166 W. 75th St., New York, NY 10023
Scubapro dealer, on-site air, open 7 days a week.
NAUI, PADI, YMCA: Basic-Instructor. Local, group trips & travel.

PARAGON SPORTS 212/255-8036
18th Street & Broadway, Manhattan, NY 10003
GSD—Sherwood—U.S. Divers.
Poseidon—Henderson—Zeagle—Ikelite—Heuer.

THE WESTCHESTER DIVE CENTERS, INC. 914/937-2685
62 Westchester Ave., Port Chester, NY 10573
Putnam Dive Center, Mahopac, NY 10541 914/628-1386
Area's most comprehensive year-round scuba school.

ZODIAC WATCH CO.—FACTORY DIVE WATCH REPAIR CENTER
516 5th Ave., Rm. 303, New York, NY 10036 212/869-8999
Rolex & all brands repaired & pressure tested. Heuer authorized
sales and service. Huge discounts. Ron Gordon proprietor.

NORTH CAROLINA

ATLANTIC DIVERS INCORPORATED 919/441-1111
6912 S. Croatan Hwy., P.O. Box 1091, Nags Head, NC 27959
PADI 5 Star Training Facility.
Specialists in Diver Education, Trips, Sales & Service.

DISCOVERY DIVING CO., INC. 919/728-2265
414 Orange St., Bearfort, NC 28516
Dive the graveyard of the Atlantic: the U352, freighters, tankers.
4 boats, daily dives, full service store, classes, dive lodge.

NAGS HEAD PRO DIVE CENTER 919/441-7594
P.O. Box 665, Nags Head, NC 27959
Wreck U-85, schooners, WWII freighters, tankers, aboard Sea Fox.
50' custom boat, PADI instr., sales, svcs., mtls., air, 5,000 psi.

OLYMPUS SPORTS INC. 919/726-9432
P.O. Box 486, Morehead City, North Carolina 28557
Dive the clear warm water of NC on area's finest dive boat.
Groups up to 26 or individual walk-ons. Full Dive Shop Facility.

OHIO

LONG LAKE SCUBA 419/331-3483
3160 Long Rd., Lima, OH 45807
PADI, SSI. Sales & service.
M-F 12-7, Sat. 10-5, Sun. 12-4/Winter M-F 4-8, Sat. 10-5.

PENNSYLVANIA

DIVER'S WORLD (814) 459-3195
1904 W. 26th St., Erie, PA 16508
Full Service Dive Store, Equip. Sales, Repair, Rentals, Air,
Travel. NAUI P.D.C. of PA. Instr. & Retail Management Training.

DON COOK'S SCUBA EQUIPMENT 717/326-2091
940 Market St., Williamsport, PA 17701
Air, certified instruction, PADI, sales, service.
PADI training facility, pro dive shop. Closed Wednesday.

DUDAS' DIVING DUDS 215/436-0176
101 Barrams Lane, West Chester, PA 19382
Full service NAUI pro facility. PA's largest selection of wet
& dry suits. Full line of photo equip. Wreck & southern dive trips.

HARRISBURG SCUBA CENTER, INC. 717/561-0517
3997 Sunnycrest Drive (Rear), Harrisburg, PA 17109
5 PADI certified instructors, sales, service, rentals, air, dive
trips. PADI training facility. Weekdays 6 PM-9 PM, Sat. 9-5.

JOLLY ROGER DIVE SHOP, INC. 717/866-5535
Rd. #1, Millardville Rd., Richland, PA 17087-0250
Full service. Hydro—Air sales.
Diving at shop location.

PITTSBURGH SCUBA 412/621-9900
314 North Craig St., Pittsburgh (Oakland), PA 15213
Equip. sales, mtls., in-house repairs, air trav., instr. Full
Service PADI 5 Star Training Facil., wklys. 11am-7pm, Sat. 11-5.

SMOKEY'S DIVER'S DEN 717/393-5333
412 N. Duke St., Lancaster, PA 17602
Certified instruction, rentals, sales, service. U/W films 3
videotapes. Programs for schools, clubs & organizations.

WASHINGTON SCUBA CENTER 412/228-8686
R.D. #6, Box 518, Washington, PA 15301
NAUI Pro Facility. Lessons-Sales-Service-Rentals.
Large Selection, Guaranteed Tri-States Lowest Prices.

RHODE ISLAND

DIVERS WORLD (DIV. OF ALPINE) 401/849-3330
754 Main St., E. Greenwich, RI; 100 Main St., Westerly, RI &
Bellevue Plaza, Newport, RI. Comp. sls. & svcs. Disc. prices,
all top brands. Low rates on lessons. RI's most comp. dv. shop.

VIKING DIVE SHOP 401/847-4179
124 E. Main Rd., Newport, RI 02840; Rt. 138
Air, sales, rentals, repairs, hydros, instruction. Wet and
dry suits repaired and altered. Serving divers over 21 yrs.

SOUTH CAROLINA

S.C. SCUBA/DIVING VENTURES UNLTD. 803/626-3265
1514 Hwy. 501, Myrtle Beach, SC 29577 803/626-3265 or 354-7760
PADI Full Service Training Facility/Ocean Express Charters.
SC's best wreck, ledge, river dives. Paramedic/instr. onboard.

TENNESSEE

JOHN D. BUTLER SCUBA SCHOOLS 615/356-9340
5600 Brookwood Terr., Nashville, TN 37205
PADI Pro Facility, Full Service Store. Instruction,
Dive Trips, U/W Photo Specialists, Professional Service.

SKI/SCUBA CENTER, INC. 615/523-9177 or 615/673-8733
2543 Sutherland Ave., Knoxville, TN 37919
PADI 5 Star Facility. Indoor pool on premises, full svcs., trips.
Scubapro, US Divers. Retail & mtl. dv. & snow ski. Mon-Sat. 10-6.

TEXAS

AQUAVENTURES-HOUSTON US 1-800/468-6224
1614 Gessner Dr., Houston, TX 77060 TX 713/468-6211
Our 11th year! PADI 5 Star Instructor Development Center. Sport
& Commercial Students Welcome! Friendly Sales, Travel, & Svcs.

ARLINGTON SCUBA CENTER, INC. 817/265-6712
2414 W. Park Row Dr., Arlington, TX 76013
PADI 5 Star training, air, sales, rental, repair, trips.
Most complete pro service in North Texas.

DIVER'S DEPOT 409/564-DIVE or 564-9622
P.O. Box 2687, Nacogdoches, TX 75963
PADI—7 day IDC's/IEC's, Master Diver Trainer-status update.
6 Week Career Development Program.

SCUBA AIR COMPRESSOR SERVICE, INC. 214/661-8695
14055 Proton Rd., Dallas, TX 75244
New/used high PSI compressors.
Sales, service, overhaul, parts, rentals.

VERMONT

VICTORY AUTO & SPORTS, INC. 802/862-0963
145 Cherry St., Burlington, VT 05401
Complete dive shop, repairs and instruction.
"Down Deep We Care."

VIRGINIA

SEA VENTURES, INC. 703/425-7676
Pickett Shopping Center, 9444 Main St., Fairfax, VA 22031
Northern VA's complete dive shop. Open daily.
Trips, instruction, sales, rentals, repairs. NAUI, YMCA, & PADI.

"THE" DIVE SHOP 703/698-7220
2841 Rogers Dr., Falls Church, VA 22042
PADI 5 Star INSTRUCTOR DEVELOPMENT CENTER
Full service for Washington, D.C. metro area.

THE WET ONES, INC. 703/938-1111
163 Glyndon St., Vienna, VA 22180
N. VA's oldest PADI 5 Star facility, instr. all levels,
sales & service, grp. & indiv. trips, photography.

WASHINGTON, D.C.

NATIONAL DIVING CENTER 202/363-6123
4932 Wisconsin Ave. NW, Washington, DC 20016
Authorized Scubapro sales & service,
quality instruction, trips, rentals.

WEST VIRGINIA

HUNTINGTON/CHARLESTON SPORT & COMM. DIVING CENTER
3234 Woodland Dr., Huntington, WV 25705 304/529-6622
916 McCorkle Ave. W., St. Albans, WV 25177 304/72-SCUBA
Full Svc. Facil., local lakes & Ohio River. Come dive with us!

WISCONSIN

3 LITTLE DEVILS SCUBA SHOP 608/356-5866
Rt. 4, Hwy. 123, Baraboo, WI 53913 800/356-9016 & 9017
North entrance to Devil's Lake State Park. PADI 5 Star Instructor
facility, Lake Superior & West Palm Beach charter boat.

CANADA

A.B. DIVERS WORLD 604/732-1344
1523 W. 3rd Avenue, Vancouver, B.C. V6J 1J8
Full service, suits made on premises.
Charters Aboard M.V. Oceanair, Explore, Photo, Wreck.

BEACH GARDENS DIVING RESORT LTD. 604/485-6267
7074 Westminster Ave., Powell River, B.C., Canada V8A 1C5
Dive the Emerald Sea w/Jim Willoughby—Diving Director. Charter bts.,
grp. rates, air, U/W guides. Canada's only NAUI Prof. Devel. Ctr.

HOT SIDNEY WATERFRONT DIVING RESORT
2537 Beacon Ave., Sidney, B.C., Canada V8L 1Y3 Dive Canadian
Islands. 1st Class full facility Dive Resort. Denis Paquette—
Dive Co-ordinator, chr. bts., grp. rates, Pro Scuba, U/W Guides.

AUSTRALIA

AQUARIUM DIVE TRAVEL AUSTRALIA Int. + (03) 258863
38 Taylor St., Ashburton, Vic. 3147 Australia Tlx. 35411
AUSSIE: Dive Boats: Nimrod, Reef Explorer, Supersport, Heron
Whitsunday etc. South Pacific Islands, Teitia live-a-board.

BEST OF THE CORAL SEA (800) 348-3669 (212) 599-0886
Dive Marion & Abington atolls. Superb 54' live-a-board dive boat
for 8 guests. Professional travel services. Grp./Indv. bookings.
8 day economy program \$1500 & 14 day full program \$2200.

CAIRNS DEEP SEA DIVERS DEN 070 511404 AH 542450-541415
319 Draper St., Cairns, Aust. 4870 PADI trng. ctr.
Dive Centre Facil., 2-3 day divg. trips to outer reefs Ex Cairns.
3 Departures weekly, 4 day diving trips Cod Hole/Charters...

DIVE AUSTRALIA/PAPUA NEW GUINEA 415/434-3400
Reef Explorer, Auriga Bay, Scheherazade, Water-
Sport, Divemaster, Challenger, Plus Island Resorts!
50 Francisco St., 205A, San Francisco, CA 94133.

GREAT BARRIER REEF AND CORAL SEA +61-70-514055
Going Places, 26 Abbott St., Cairns, Qld. 4870 Tlx: AA48338
Adventure travel specialists to Australia & New Guinea. Over
20 dive boats & island dives from day trips to extended charters.

GREAT WHITE SHARK EXPEDITION—The Everest of diving, face to
face with the Big Animal for five adventurers & photographers.
Using protective cages, with expert guide—Mr. Rodney Fox.
(212) 599-0886 LA MER DIVING SEAFARI, INC. (800) 348-3669

M.V. BALI-HAI II Ph.: 011 61 070 545545
P.O. Box 692, Cairns, Nth. Qld., Australia 4870
Dive Cod Hole, Ribbon Reef, Lizard Is., 150 mi. of outer reef.
7 & 10 day sched. depart., for indiv., groups & spl. chrtr.

PERTH DIVING ACADEMY (09) 344-1562
2811 Wanneroo Rd., Nollamara, Western Australia
Boat dives to Marmion Marine Park. FAUI Inst. Sales,
Service, Testing and Charters. Open 8:30-6:00 7 days a week.

PETER TIBBS SCUBA SCHOOL 070/521-266
P.O. Box 1983, Cairns, Australia 4870, Telex 48397
Daily trips, O/night trips (air-cond. 110 ft.) Scuba instr., hire
equip. Exclusive charters. 15 yrs. unblemished record. Open 7 days.

PRO DIVE CAIRNS AUSTRALIA 61-70-519915
P.O. Box 5551, Cairns, Aust. 4870
O/night & 3 day/2 night trips 2x weekly. PADI instruction.
Outer Northern Barrier Reef trip specialists.

BAHAMAS

CORAL HARBOUR BEACH CLUB/DIVE RESORT 809/326-1144
2 Totally self-contained dive resorts. New Providence/Andros. 3-8
Day land/dive pkgs. from \$200 up. Trips to out-islands. Live-a-
board boat. Weekly trips. Underwater Adventures, Inc. 800/722-DIVE.

CORAL HARBOUR DIVERS (U.S.) 800/327-0010 (FL) 800/432-5034
P.O. Box SS5635, Nassau, Bahamas—in Nassau 809/326-4171 or
327-7862. Gateway to exciting James Bond movie site & drop-
off to tongue of ocean-Pkgs. avail. 4 days/3 nts. from \$199.

DIVE DIVE DIVE LTD. 800/328-8029 ext. 246
P.O. Box N-8050, Nassau, Bahamas 809/326-1143
Discover Southern New Providence Diving. Wrecks, Reefs, Walls.
Daily pick-ups from all hotels, secluded waterside villas.

GRAND BAHAMAS—LUCAYA 203/852-9300
Water's Edge Resort & Marina Call Collect
Luxury furnished waterfront condos complete w/linens to china.
Pool, tennis. Studio—\$300/wk., 2 BR/2B—\$590/wk. Dive disc. avail.

Peter Hughes Dive S. Ocean/Nassau 607/277-3484; 800/367-3484
Opening Nov. 1, 1987. Divi Bahamas Bch. Resort/Country Club. Peter
Hughes Dvg./Divi Hotels. Compl. dv. shop/exp. scuba instr./custom
design dv. bts./Divi-incl. pkgs. 520 W. State St., Ithaca, NY 14850

ROYAL AMERICAN HOLIDAYS
3111 University Drive, Suite 403, Coral Springs, FL 33065
Bahamas destinations. Send \$5.00 for 2 for 1 vacation
offers.

RUM CAY CLUB Call Toll Free 800/334-6869
P.O. Box 22396, Ft. Lauderdale, FL 33335 or collect 305/467-8355
U/W photographers paradise. Full service photo lab, dive shop.
Resort course, certification. EP or FAP. Big rooms, great meals.

UNDERWATER EXPLORERS SOCIETY—UNEXSO (809) 373-1244
P.O. Box F-2433, Freeport, Bahamas Toll Free 1-800-992-DIVE
Famous facility, guided reef trips, instruction, FL (305) 761-7679
group rates, 18' deep tank, chamber, air. Great Packages!

VALENTINE'S DIVE CENTER U.S. 502/897-6481
P.O. Box 1, Harbour Island, Bahamas
AM, PM, & Night Dives. All levels of instruction. Rentals.
U/W Photography & Video, Individual & Group Packages.

WALKER'S CAY HOTEL & MARINA, ABACO 800/327-3714
700 S.W. 34th St., Ft. Lauderdale, FL 33315 FL 800/432-2092
Undiscovered & unspoiled! Virgin reefs, spectacular caves.
Dive shop, boats, rental equipment, certification, great packages!

BARBADOS

DIVE BOAT SAFARI 809/429-8216; 809/427-4350; 800/445-8667
Hilton International Barbados, Needhams Point, Barbados
Diving school PADI & NAUI instr., sales, reef, wreck, night dives
(Right at hotel) Full service operation, USA & CAN Hrs.

PETER HUGHES U/W BARBADOS 800/367-3484; 607/277-3484
Divi Southwinds Beach Hotel
Peter Hughes Diving/Divi Hotels, 520 W. State St., Ithaca, NY 14850
Cmpl. Dv. shop/xprt instr./Photo/cust. boats/vac. dv. pkgs. avail.

SCUBA DIVE RENTALS RENTALS 809/426-6936
Barbados Hilton Hotel (Arcade) Amer. Ex., Visa, M/C
Air & rentals, 7 days a week, year-round, Sherwood sales & service.
e.g.: Comp. equip. set, 24 hrs. \$25 U.S., additional fill \$2 U.S.

THE DIVE SHOP LTD. 809/426-9947
P.O. Box 44-B, St. Michael, Barbados, W.I. Telex #2203 BETBRUW
Daily dive trips. Reef, wrecks and artifact dives.
Dive packages with accommodations. NAUI certification.

WILLIE'S WATERSPORTS 809/425-1060 or 424-1808
Blackrock, St. Michaels, Barbados & Haywoods Resort, St. Peters,
Barbados. Complete dive and watersports facilities. Wreck
Stavronikita, reef & resort dives, air station. Group rates avail.

BELIZE

AMBERGRIS LODGE U.S. Tel: (816) 361-2345
Ambergris Caye, Belize. P.O. Box 123, K.C., MO 64141
Caribbean Sampler: 4 da-3 nt. full Amer. Plan w/airport trans.:
\$198 p.p. dbl. occ., group rates, diving and fishing options.

Discover W. Caribbean Diving 504/899-8687; U.S. 800/348-9101
Fantasia Dive Wholesalers, 737 State St., New Orleans, LA 70118
Air inclusive pkgs., blocked space holidays, industry commissions
guaranteed, also specialists: Cancun, Cozumel, Bay Islands, Belize.

FORT GEORGE HOTEL, Marine Parade, P.O. Box 321, Belize City.
Group leaders/dive shop operators welcome as our guest to see
boats, meet skippers. Wonderful new dock, easy access blue hole
& all. Write or call Paul Hunt 011-501-02-7483/7400.

SAINT GEORGE'S LODGE, Box 625, Belize City 011-501-02-44190
"The place to stay." Esquire. TX 214/341-5577; 800/631-0032
"Surpasses Cayman" Undercurrent. CA 714/955-2774; 800/854-9303
NAUI dream resort certifications. CA 800/262-6670; 800/821-6670

VILLA AVENTURA—A DIVER'S VILLAGE AT CAYE CAULKER
P.O. Box 2664, Evergreen, CO 80439. 303/674-9615
Complete dive services and accommodations
for groups and individuals. 800/538-6802

BERMUDA

SKINDIVING ADVENTURES 809/234-1034
P.O. Box 165, Southampton, Bermuda.
PADI, NAUI, SSI Facilities: 2 Large custom dive boats, 2 tank
dives. Wreck & reef dives, rentals, sales, instruction, Nikons.

SOUTH SIDE SCUBA LTD. 809/298-1833
Box HM 1606, Hamilton, Bermuda HMGX 809/293-2915
2 Locations, 2 Custom Dive Boats, 2 Tank Dives,
Night Dives, Experienced Divers/Beginners/Photo.

BONAIRE

BONAIRE—BACHELOR'S BEACH APARTMENTS 202/338-0690
Enjoy beauty above and below water from our private patio
pier. Dive in luxury yet inexpensively. Furnished 1 & 2 BR w/ac.
c/o 4622 Charleston Terr., N.W., Washington, DC 20007.

BONAIRE BEACH BUNGALOWS 717/586-9230
P.O. Box 264, Waverly, PA 18471
Luxurious 2 BR villas, A/C, kit., fully equipped, diving, 3 min.
from downtown, 15 feet from ocean, total privacy, reasonable rates.

BONAIRE CLUB FLAMINGO. New/Mdm./Best on isld. 212/734-2421
Eff. apts. sleeps 4, w/maid service. \$450/week. Disc. apr. \$419.
A Peter Hughes Dive Operation. Further discounts for groups.
Michael Reed, 300 E. 71st St., #14M, New York, NY 10021.

BONAIRE SUNSET VILLAS 011-599-7-8291
P.O. Box 115, Bonaire, Netherlands Antilles
Beautiful 1, 2, 3, 4, 5, Bedroom Villas. Private, cable TV.
A/C in bedroom, kitchen, fully furnished, reasonable rates.

Bruce Bowker's CARIB INN 011-599-7-8819
P.O. Box 68, Bonaire, Netherlands Antilles
Largest selection of sites, reef trips, air, sales, rentals,
full SCUBA instruction, Spacious rooms, ocean view, a/c, pool.

CAP'N DON'S HABITAT U.S.: Dial Direct 011-599-7-8290
P.O. Box 88, Bonaire, Netherlands Antilles
Luxury villas, 2 bedroom cottages, single & double economy
rooms. 24 Hour unlt. divg., pkg. plans, low off season rates.

CARIB VACATIONS, LTD. 212/819-9890 305/793-8016
Box 110325, 1133 Royal Palm Bch. Bl., Royal Palm Bch., FL 33411
Waterfront and waterview efficiencies and 1 to 5 bedrm. apts.
and villas. Low, low rates. Dive packages. Special air rates.

PETER HUGHES DIVE BONAIRE 800/367-3484, 607/277-3484
Divi Flamingo Beach Hotel & Casino—Peter Hughes Diving/
Divi Hotels, 520 W. State St., Ithaca, NY 14850. World's premier dive
operation. Instr./2 dive piers/comp. photo/11 dive boats.

SAND DOLLAR DIVE & PHOTO 609/298-3844
c/o 50 Georgetown Rd., Bordentown, NJ 08505
Full service dive & photo with Andre Nahr. U/W video,
beachfront unit, full kitchen, A/C PADI instruction.

SOROBON BEACH RESORT 011-599-7-8080
P.O. Box 14, Bonaire, Netherlands Antilles Tlx: 1200 inpo
25 Chalets on private nude beach. Diving, Windsurfing & Sailing.
Family oriented with More Mozart than Rock & Roll.

SUNSET INN 011-599-7-8291
P.O. Box 115, Bonaire, Netherlands Antilles
7 Dbl. rooms. All rooms cable TV, fridge, A/C. Near 3 dive
operators. Communal kit. and living area with TV. Beach in front.

TOUCH THE SEA with DEE SCARR 011-599-7-8529
c/o Touch the Sea, P.O. Box 369, Bonaire, Netherlands Antilles
Personalized dive guiding, marine creatures, photos, much more.
Reservations recommended. (Closed July thru October).

BRAZIL

AQUADIVE COM. IMP. EXP. LTDA. (011) 825-6355
Rua Alagoas 952 CEP 01242 S.P. Brazil
Full Service Dive Shop: Sales, Rentals, Air, Repair,
Indoor heated Pool, Certification, Travel.

KARIMAR—DIVE BRASIL (0132) 34-6929
R. Amador Bueno, 73, Santos, Sao Paulo, Brazil Tlx: 1124789
Sales, rentals, service, air, professional instruction
Specialist in weekend dive trips to Sao Paulo area islands.

PISCES DIVERS BRAZIL Phone: (011) 212-4473
R. Camargo, 26, Sao Paulo, Brazil 05510 TLX: (011) 24233
Sales, Rentals, Dive Resort, Repairs, Air, Diving,
School CBPDS/CMAS Certifications, Guided Tours, Travel, Bilingual.

BRITISH VIRGIN ISLANDS

AQUATIC CENTRES (DIV. OF BASKIN IN THE SUN) 800/345-6296
P.O. Box 108, Tortola, B.V.I. Alan Baskin & Eva Cope 809/494-2858
PADI Trng. Facil., Hotels-Prospect Reef, Treasure Isle & Peter Isld.
Prsnl. svcs. designed to spoil you... FANTASTIC! (Rhône & Reefs)

BLUE WATER DIVERS 809/494-2847
P.O. Box 437, Road Town, Tortola, B.V.I.
Mike & Keith Royle—PADI Instructors. Dive tours,
intro courses, rentals, air fills, equipment rentals.

UNDERWATER SAFARIS 800/535-7289
P.O. Box 139, Roadtown, Tortola, B.V.I. 809/494-3965
Rhône and reef dives daily, PADI training facility,
sales, rental, photo center, hotel dive/sail packages.

VIRGIN ISLAND SAILING LTD. 800/648-3393 800/448-8866
P.O. Box 146, Road Town, Tortola, B.V.I. 809/494-2774
Sail & dive pkgs. aboard pvt. motor & sailing yachts. Taking
2-18 guests. Scuba, sail, surf, ski in unspoiled waters.

CARIBBEAN

AQUARIUM DIVE RESORT (811) 6649 or 6378
P.O. Box 1692, San Andres Isla, Colombia Tlx: 40126
Guided U/W tours, air, rentals, instruction.
PADI, CMAS, FEDECAS. Pablo Montoya, Diving Operator.

DIVER'S DEN DOMINICAN 809/529-8454
P.O. Box 843, San Pedro de Macoris, Dominican Republic
PADI Training Facility, daily guided U/W tours, sales, service,
air, photo, rentals, bed & breakfast packages available.

CULEBRA ISLAND HOME RENTALS 203/268-4964
Waterfront condos on unspoiled Culebra Island, 203/261-7344
between Puerto Rico and St. Thomas. Great diving on
reefs of National Wildlife Refuge. NAUI & PADI instr. nearby.

KALIKO Dive Center & Beach Club, Box 58, Port-Au-Prince, Haiti
Discover our Magic Isle below and above water. Dec-Apr. 4 days.
unlimited boat diving, 2 meals, \$324 PP. dbl. occ. After April 15
\$269. Tel: 2-6530, US 800/423-6671, IL 312/519-9800 COLLECT.

TOBAGO SCUBA LTD. (809) 639-4360
Jane Boyle, Exciting, Tobago Rep. Trinidad & Tobago
Guides to expedite drifts or leisurely photo dives
from boat. NAUI, CMAS. Exceptional U/W diversity.

CAYMAN ISLANDS

BEACH LODGE RENTAL RUM POINT 609/546-6980
Grand Cayman. Maid, Scuba Boats, Beach Snorkeling,
\$450/wk. (peak season), \$350/wk. (off season).
103 White Horse Pike, Haddon Heights, New Jersey.

DIVER'S WORLD, LTD. OF CAYMAN 809/949-8128
Seven Mile Shopping Ctr., P.O. Box 917, Grand Cayman, B.W.I.
Diving equipment & supplies, sales, service, repairs & rentals.
PADI certification dives U/W photo. Supplies & camera rentals.

PETER HUGHES DIVE TIARA 800/367-3484; 607/277-3484
Divi Tiara Beach Hotel, Cayman Brac—Peter Hughes Diving/
Divi Hotels, 520 W. State St., Ithaca, NY 14850. Secluded. Modern
facil./Instr./Cust. dv. boats/personalized svcs. All-inclusive pkgs.

PIRATES POINT RESORT, Little Cayman, B.W.I.
New ownership, gourmet chef, new boats and equipment.
All inclusive pkg., unlimited divg. \$145/day p.p./dbl. occ.
U/W videos. Direct booking, 809/948-4210.

SAM McCOY'S—LITTLE CAYMAN 800/843-2177
3 meals, 3-tank boat dive, 412/834-4064
unlimited air, U/W video,
HYDROPLANE: \$135/day, group rates.

SCUBA SAFARI \$399/wk. pkg.: divg./accom/20% commission for small grps. Specializing in private diving to your request & video portraiture. \$50/Day incl. your stay/dive/drive. Flex. pkg.!! P.O. Box 2029, Grand Cayman, BWI or call 809/94-93742.

65' LITTLE CAYMAN DIVER (800) 348-3669 (212) 599-0886
Superb live-aboard dive boat. Unlimited diving on the best walls in Caribbean. Splendid vacation. Individual & group booking. We make air arrangements. LA MER DIVING SEAFARI, INC.

UNSPOILED CAYMAN BEACH HOUSE RENTALS
Furnished 1-3 bdr. homes. Scuba, snorkeling, beachcombing. Spectacular wall diving. No crowds. \$250-500/wk. Dive pkgs. & more. Jim Waldron, Route 1, Box 72B, Joseph, OR 97846 503/432-9431.

COSTA RICA

PHANTOM ISLE LODGE 713/489-9156
USA Office: P.O. Box 559, Manvel, TX 77578
Pacific jungle lodge at pirate haunt. Exotic fish & whales. New 38 ft. boat. Ride horses, fish, visit Corcovado forest.

FAR PACIFIC

DIVE PHILIPPINES, THAILAND, MALAYSIA 415/434-3400
Superb live-aboard dive cruises: 2-20 divers.
U.S. agent for local dive operators.
50 Francisco St., 205A, San Francisco, CA 94133.

Papua New Guinea Solomon Islands Maldives Islands
World class diving. Superb selection of live-aboard dive cruises. 4-10 guests. Expert dive travel services. Group and individual bookings. La Mer Diving Seafari (800) 348-3669 (212) 599-0886

FIJI

AQUA-TREK OCEAN SPORTS Adventures 800/826-0057 in Calif.
P.O. Box 697, Moss Beach, CA 94038 (800) 541-4334 Outsd. CA.
Dive Fiji—Largest selection of Tours available. PADI Facilities.
Travel Agents, Dive Shop and Single Diver Tours. Group Discounts.

BEQA DIVERS FIJI 361088 or 361241
GPO Box 777, Suva, Fiji. Tx. FJ2430. Cables DIVEFIJI
"Great Fun" "Super Enthusiastic Crew" "Beqa Lagoon is beautiful"
"Great Friends" "Fantastic Diving." When only the best will do!

FIJI DIVING SPECIALISTS 800/247-3483
Groups/individuals, 13 yrs. exp. 206/441-3483
U.S. office for Taveuni, Maravu, Gamea, Namale & More.
170 Denny Way Seattle, WA 98109

THE BEST OF FIJI (800) 348-3669 (212) 599-0886
Magnificent 72' luxury cruiser, fully A/C for 8 guests. Unlimited diving on beautiful reefs. Professional dive travel services.
8 day economy program—\$1500 & 14 day full program—\$2700.

WATERSPORTS 808/661-4363
P.O. Box 1656, Lahaina, HI 96767
Fiji/Maui 10 Day Pkg. 12 Dives Including Air From W. Coast,
Hotels, Diving. All The Best Spots. Checkouts & Certifications.

HONDURAS BAY ISL.

ANTHONY'S KEY RESORT—ROATAN BAY ISLANDS U.S.A. Exec. & Reserv. Office: Nat'l 800/227-DIVE FL 800/343-DIVE or 1385 Coral Way, Ste. 302, Miami, FL 33145 305/858-DIVE
The Western Caribbean's most popular dive resort w/photo fac.

BAY ISLANDS DIVE RESORTS 800/328-0734
Go Diving Inc., 7630 W. 78th St., Minneapolis, MN 55435
Packages to Anthony's Key, CoCo View, Bayman Bay Club, & Posada del Sol, Barrier Reefs, Fantastic walls & more.

BEACH HOUSE RENTAL—ROATAN ISLAND 615/535-2032
Marsha Andrews, 660 Oak Shadow Dr., New Johnsonville, TN 37134
Near Anthony's Key Resort. 2 BR dtx., maid, private bch., scuba, snorkel, 4 persons, \$450/wk. Brochure, Reservations.

COCO VIEW RESORT—ROATAN 800/282-8932
P.O. Box 877, San Antonio, FL 34266 904/588-4131
\$450/7 nights. Unlimited wall diving guaranteed 365 days a year! All meals. Live-aboard dive boat now available.

Large Spacious Home on Small Island (512) 863-9079 collect
Darrel & Marla Rea, 114 Oak Ridge Cir., Georgetown, TX 78628
Built out over Coral Reefs. Air, boat, all meals, guide, maid, cook. \$395 Per Week.

LIVE-ABOARD—REEF RUNNER 800/282-8932
P.O. Box 877, San Antonio, FL 34266 904/588-4131
Week long charters & Surf'n Turf Land and Sea
Combination Trips. Group Rates Available.

TOP DIVE INN of the SUN/POSADA DEL SOL Guanaja, Bay Isl.
P.O. Box 537, Boca Raton, FL 33429 800/642-3483; 305/994-6232
A dive & fish paradise! \$549 to \$675 7 night pkgs. includes 3 dives daily & 1 nt. dive per week, meals, lodging & more!!

INDIAN OCEAN

BEST OF MALDIVES—Great live-aboard dive boat, 72' Rusalka, 8 guests, extraordinary diving & underwater photography opportunities. Professional travel services. Grp./indv. bookings. (212) 599-0886 LA MER DIVING SEAFARI, INC. (800) 348-3669.

JAMAICA

CLUB CARIBBEAN/SUNDIVERS 809/973-3507; 800/221-4588
P.O. Box 65, Runaway Bay, Jamaica, West Indies
Hotel cottages—Runaway Bay, Jamaica's finest diving, 1,000 ft. bch. free skiing, windsurfing, sailing, snorkeling, glassbottom boat.

DIVE SEAWORLD
Montego Bay's most complete dive facility—at 4 Major Hotels
Unlimited—4 day/3 night—Dive/Hotel Packages from \$199
Call Aero International Tours—Nat'l 800/327-0010; FL 800/432-5034.

NEGRIL SCUBA CENTRE 809/957-4323
Negril Beach Club, Negril, Jamaica, West Indies 809/957-4425
Beginner lesson, dive pkgs., certification, camera mtls. Beautiful exciting daily dives with qualified PADI, MDEA Instructor.

POSEIDON NEMROD DIVERS 809/952-3624
P.O. Box 152, Reading, St. James, Jamaica, W.I.
2 Locations in Mo-Bay. Dive packages. PADI lessons and specialties. Video, photo, shore & boat diving.

SUNDIVERS, JAMAICA LIMITED 809/973-2346
P.O. Box 212, Runaway Bay, Jamaica, West Indies 809/973-3454
Jamaica's only PADI 5 Star Instr. Dev. Center.
Sales & svcs., camera rentals, videos, resort dive pkgs.

JAPAN

MACK'S DIVING OF JAPAN 052-211-1772
2-18-34 Nishiki, Naka, Nagoya 460, Japan
Full service diving system, U/W photo specialist.
Pool, shop, repair . . . now. Big boat in Okinawa!!

MACK'S DIVING OF OKINAWA (PHOENIX) (052) 211-1772
Fantastict! 56' 30 knots dive boat "Phoenix"
Day trips to Coral Paradise "Kerama" Islands
Scheduled English spoken trips. Call (052) 211-1772

SEA TOPIA DIVING CENTER, INC. 09889-2-5567
593 Isa, Ginowan City, Okinawa, Japan
Custom made wetsuits, PADI instruction.
Sales, repair, 3,000 psi air station, indoor pool.

LEEWARD ISLANDS

ANTIGUA, WEST INDIES—DIVE RUNAWAY 809/462-1318
P.O. Box 874 1st class boat diving (wreck, reef, night, etc.) Accommodations, restaurant, BBQ, 365 beautiful beaches. PADI Training Facility. Low summer rates.

MEDITERRANEAN

CYDIVE CYPRUS 61-34271
1, Poseidon Ave., Kato Paphos, Cyprus Tx: 5337 CY
PADI 5 Star IDC & BSAC Recog. courses to all levels.
Dive trips. Hire. Sales.

MEXICO

AA1 SCUBA CANCUN 800/348-9101 (LA) 504/899-8687
Box 517, Cancun, Q. Roo., Mexico 77500 988/4-23-36 & 3-10-11 Ex-comm./military dvr-owner 30+ yrs. divg. exp. NAUI, CMAS, PADI Master instr./intl. trng. facil. Trs., classes, referrals, recomb. chmbr.

AAA AQUA TOURS S.A. 52(988)30400
P.O. Box 528, Cancun, Q. Roo., Mexico 77500 30227 or 31137
Dive Mexican Caribbean. Daily trips to Isla Mujeres, Cancun & Cozumel. Instruction, rentals, pkgs. and group rates.

A DIVE HOLIDAY IN COZUMEL 800/634-3483
12325 Zavalla, Houston, TX 77085 713/729-3483
Direct link, best price in pkg. Includes: untd. beach & night boat dives, reliable, full travel svc., daily fast boat svc. 7 days a week.

AKUMAL DIVE SHOP—4 Instructors PADI/NAUI/SSI certs & 10 specialties. Full service center 15 years on the Mexican Caribbean. Rentals, photo, trips, snorkeling, fishing. Dick Blanchard, Postal 1345, Cancun, Q. Roo., Mexico 77500.

AQUA SAFARI Since 1966 (987) 20101; (713) 448-3483
P.O. Box 41, Cozumel, Mex. 77600 (800) 854-9334
Custom 38' dive boats—private dock.
Repair center—PADI International Training Facility.

BAJA diving, FANTASIA DIVERS 800-336-DIVE; TX 713-558-9524
Loreto dive &/or hotel accommodations. Complete watersport facility specializing in scuba, fishing & sailing. Experienced PADI & NAUI Instructors. Call for brochures and reservations.

BAJA EXPEDITIONS, INC. (outsd. CA) 800/843-6967
2625 Garnet St., San Diego, CA 92109 619/581-3311
Baja's Sea of Cortez Diving Expeditions aboard
the BAJA EXPLORADOR and DON JOSE.

BAJA'S FINEST WATERSPORTS CENTERS/NAUI-PADI-YMCA-CMAS
Cabo Acuadeportes S.A. de C.V. (684) 3-06-62 or 3-06-63
P.O. Box 136, Cabo San Lucas, B.C.S., Mexico
Rentals—Sales—3500 PSI—Instruction—Boat & Beach Dives.

BOOK DIRECT WITH REPS
Lowest cost dive packages. La Ceiba, La Perla, Barracuda, Galapago Inn & La Plaza hotels. 13 yrs. Cozumel exp. Full-time Cozumel on-site rep. USA office: Wash. 206/441-3483 or Nat'l 800/247-3483.

CABO DIVERS 706/843-0747
P.O. Box 61, Cabo San Lucas, B.C.S., Mexico
PADI Certified Instructor & Divemaster
Instruction, air, rentals, dive boat.

CASA DEL MAR DE ZIHUATANEJO (743) 4-21-19
Paseo del Pescador #20, Local 6, Zihuatanejo, Gro.
Dive the Pacific in Ixtapa, Zihuatanejo. Full divg. svcs. Cert. instr., U/W photo., snorkeling, SCUBA lessons, air, mtl., spec. trips.

CEDAM DIVE CENTER at AVENTURAS AKUMAL 800/468-6224
Mike Madden/Apartado Postal 1341 Cancun, Q. Roo., Mexico 77500
Mexico's only PADI Five Star Instructor Development Center
Cavern Dives, Daily Reef Dives, PADI Certs., Cenotes and Fun!

CHICO'S DIVE SHOP Telephone 2-18-95, 2-16-63
Paseo Diaz Ordaz 772, Puerto Vallarta, Jalisco, Mexico
Call for reservations for large groups. 50 complete diving tours, instruction, rentals, sales, resort courses.

CLUB AKUMAL CARIBE HOTEL US 800/351-1622
P.O. Box 1976, El Paso, TX 79950 TX 915/584-3552
PADI certs., uncrowded diving, bilingual dive pkg. w/meals, hotel incl. from \$51.50/day/person, rentals, 60 miles south of Cancun.

CLUB AKUMAL CARIBE—KAPALUA DIVING CENTER—English, Spanish, German spoken. Dive pkg. w/meals & hotel incl. from \$52.00/day/person. Equipment rentals, Deep Sea Fishing. Diving trips to Cozumel, Snorkeling Tours, Kayaks, Windsurfing.

CLUB AKUMAL CARIBE—Paul Bush, founder—CEDAM International Headquarters since 1958. Best diving in Mexican Caribbean, 5 min. to 2nd largest Barrier Reef in the world. KAPALUA DIVING CTR., hotel, real estate, condos, time sharing, excellent food.

COZUMEL—BEACHFRONT HOUSE
3 Bedroom, 3 bath house on its own private beach. Cook, maid. Air-conditioned, telephone, airport reception.
High season \$1550 per week. Low season \$950. 212/254-5623

COZUMEL—BEACHFRONT HOUSE
4 bedroom, 4 bathroom, air-conditioned, cook, maid, gardener. Dive boat pick up at our dock.
High season \$2,250.00. Low season \$1,250.00. 212/254-5623

COZUMEL: HOTEL CLUB DEL SOL 800/228-6112
Excellent diving coral gardens TX 713/475-0890
Restaurant/bar & jacuzzi
Dive shop. \$35 double.

DISCOVER COZUMEL DIVING (987) 2-02-80
P.O. Box 75, Cozumel, Q. Roo., Mexico 77600
UNLIMITED Scuba Diving Services. Super Hotel & Dive Pks.
For info: in USA, contact CONNIE at 1-800-328-5285.

DIVE PARADISE—COZUMEL The Best There Is!
The best in personalized service. For a wealth of free info. & reservations call our USA Office (800) 247-3483, (206) 441-3483 or write 170 Denny Way, Seattle, WA 98109.

FOR SALE—TIME SHARE—CLUB AKUMAL CARIBE 312/438-8420
2 bdms./2 baths, kitchenette, maid service.
2 weeks Xmas—New yrs. until 1997 \$7,000.00.
Rental avail. for 1987, 14 days, \$1,200.00.

GALAPAGO INN/SCUBA COZUMEL (011-52) (987) 20663/20627
P.O. Box 289, Cozumel, Q. Roo., Mexico 77600. U.S. 800/847-5708
Beachfront dive resort, complete facilities with a professional staff. 15 years experience catering to the serious diver.

HOUSE FOR RENT—COZUMEL 303/442-0258
Rex Walker, 3100 Airport Road, Boulder, CO 80301
3 bedroom houses, one bedroom cottages, luxury furnished from \$200/week, maids, A/C/car, scuba guide.

HOUSE FOR RENT—NEWLY RENOVATED—COZUMEL 313/823-1555
Debra Steiner, 15311 E. Jefferson, Grosse Pointe Park, MI 48230
3 Bedrooms, 3 baths (one is a large master bdrm. suite), A/C, pool, maid, quality furnished, full modern kitchen, excellent location.

MARISLA II, LA PAZ, B.C. 619/755-0375
P.O. Box 2248, Del Mar, CA 92014-1548
Luxury diving in the Sea of Cortez (see Dec. '85 Undercurrent).
Unlimited diving aboard 121' ship, 8 dbl. staterooms, xint. food.

MULEGE DIVERS
Madero #45, Mulege, Baja, California Sur, Mexico
Guided underwater tours, air, service, equipment rental and sales. PADI certification classes.

OASIS CONTINENTAL HOTEL & DIVE OPERATION (987) 2-02-80
P.O. Box 268, Cozumel, Q. Roo., Mexico 77600
NEW 80 A/C rooms, complete dive facility, Air/Hotel/Dive pkgs.
Grp. rates. Exclusive agents: GO DIVING, INC. (1-800-328-5285) MN.

Playa Maya Divers, Cozumel U.S. (800) 348-9101 LA (504) 899-8687
Fast boats—custom dives—airport hosting—total packages including air fare/select hotels/diving & PADI training open water cert. Max. 8 divers per dive master—10 min. to reefs!

TONY TATE'S U/W VIDEO SERVICE (987)2-14-44
P.O. Box 30, Cozumel, Q. Roo, Mexico Divers! What's
Cozumel's best souvenir? An U/W Video of your dives. Call
for demos. & appts. U/W camera rental & pre-records available.

MICRONESIA

BLUE LAGOON DIVE SHOP (Tel. 796) P.O. Box 429, Truk Lagoon,
E. Caroline 96942. Dr. into WWII history of oper. hailstorm w/
Mr. Kimio Aisek, world known prof. dvr., witness & founder of
the wrecks. Compl. svcs. w/best in "reef" & "wrecks" dvg.

BOOK DIRECT WITH REPS.
Custom packages to Truk, Palau & Ponape. Indiv. & Group packages.
We handle air, hotels, diving, transfers, etc. Phone USA office
at Wash. 206/441-3483 or Nat'l 800/247-3483.

DIVE TRUK and/or PALAU 415/434-3400
Superb live-aboard or hotel-based dive adventures.
U.S. agent designs your special tour.
50 Francisco St., 205A, San Francisco, CA 94133

MICRONESIA AQUATICS OF TRUK LAGOON
P.O. Box 57, Truk Lagoon, E. Caroline Islands 96942
Individual & group tours arranged. Professional guides
for diving & U/W photography. Complete dive services.

MICRONESIAN YACHTS CO., LTD. 670/234-6830 or 234-6843
P.O. Box 949, Saipan, CM 96950. Tel: 783630
Dive & sail remote & uninhabited islands of Micronesia incl.
Palau, Northern Marianas on maxi racing schooner 'New World'.

THE VILLAGE 797
P.O. Box 339, Ponape, Micronesia 96941. Tel: 6803
Resort hotel, restaurant, tours, spectacular diving,
private thatched bungalows with waterbeds, fabulous food.

TRUK SCUBA DIVE CENTER 00-160-691-401
c/o Hans Willander, P.O. Box 747, Moen, Truk, E.C. Is. 96942
Tours, boats, guides, equipment tel: #6835TTU-DEFM
or Chris Woodward, 1275 Florence St., Imperial Bch., CA 92032

NETHERLANDS ANTILLES

LEROY FRENCH'S OCEAN EXPLORERS PH: 011-599-545252
Simpson Bay, St. Maarten, Dutch West Indies
Complete dive shop. NAUI Instruction. 25 Years Experience.
Air fills, rentals, daily dive trips, groups.

MAHO DIVE CENTER 011-599-54-4387
Mullet Bay Resort, Saint Maarten, Neth. Ant., D.W.I.
Good diving, fine dining, casinos, discos, shopping
NAUI/PADI; VISA/MC; dive, relax, enjoy sunny St. Maarten.

SABA DEEP N.V.—ADVANCED DIVE CENTER 011-599-4-3347
P.O. Box 22, Saba, Netherlands Antilles, Dutch West Indies
Saba's Original Dive Shop. PADI/NAUI Instructors
"You've dived the rest, now dive the best."

SEA SABA DIVE CENTER 011-599-4-2246
Windwardside, Saba, Netherlands Antilles 800/328-5285
Full service dive facility. Variety of beautiful reefs.
Captain's Quarters: Deluxe Accom. set in tropical paradise.

PAPUA NEW GUINEA

JAIS ABEN RESORT PTY. LTD. 82-3311
P.O. Box 105, Madang, Papua New Guinea Tlx: NE82716
Dive coral reefs & WWII wrecks within 15 min. of resort.
Complete packages, 3 boat dives daily, NAUI facility.

RABUAL DIVE & TOUR SERVICES Tel: KAIWUNA 92982
P.O. Box 1128, Rabual, E.N.B., Papua New Guinea
Combine the superb setting & reefs of Walindi Resort
with the exciting WW II Wrecks of Rabual.

The Best of Papua New Guinea (800) DIVE-NOW (212) 599-0886
The Halsteads—Superb live-aboard dive boat, 65' TELITA.
Unlimited diving, 10 guests. Unique extension touring. Groups &
Individuals. Professional diving services by LA MER.

TROPICAL DIVING ADVENTURES PTY. LTD. 257429
P.O. Box 1644, Boroko, Papua New Guinea Tlx: NE22380
66' charter dive vessel, 36' dive launch, NAUI Pro Facility.
Bob & Dinah Halstead, Papua New Guinea's sport diving specialists.

PUERTO RICO

CARIBBEAN SCHOOL OF AQUATICS, INC. Since 1963
Captain Greg Konwek, NAUI Instr. #166 809/728-6606
La Concha Hotel, Box 4195, San Juan, PR 00905 809/723-4740
Best boat diving, scuba instruction, sailing charters.

CARIBE AQUATIC ADVENTURES 809/721-0303 ext. 3447
Caribe Hilton Int'l, P.O. Box 1872, San Juan, Puerto Rico 00903
Best reef dvg. in San Juan. NAUI & PADI instr., sales. Enclosed
reel or cave dives (4 x's daily). Live-aboard cruises 60' Feadship.

CORAL HEAD DIVERS at PALMAS DEL MAR 809/850-7208
Box CUHF, Humacao, P.R. 00661. Complete Scuba facility
including two custom built motor vessels. Exquisite Diving
plus a great variety of other activities at a unique resort.

"LA CUEVA SUBMARINA" Training Ctr. 809/872-3903 or 872-1094
2nd Level, Galerías Mall, Box 151, Isabela, PR 00662 (Daily trs.)
Snorkeling/scuba instr., trips/rentals. Trng./Pro Facil. NAUI-
PADI-NASE-CMAS. Day/nt/cavern & deep dive. Special grp. disc.

PARGUERA DIVERS TRNG. CTR. 809/899-4171
P.O. Box 514, Lajas, P.R. 00667
Discover the magic of a virgin world at a secluded resort.
Great Accommodations—Dive Packages—Pro Shop.

RED SEA

ADVENTURE CONNECTION 800/336-7717
P.O. Box 8826, Waukegan, IL 60079 312/336-7717
Dive packages: Hotels & Live-Aboard Dive Packages.
Try a Nice Sailtrek & Red Sea Dive Combo!

AQUASPORT INT'L RED SEA DIVING CENTRE LTD. 800/367-9198
Coral Beach, P.O. Box 300, Eilat, Israel 88102 Tlx: 7710 AQUASIL
Dolphin Expeditions: "The Best Of The Red Sea" PADI 5 Star Facil.
Safari, cruise, dive, windsurf, resort & advanced instruction.

DIVE SUDAN, SHARM-EL-SHEIKH 415/434-3400
Superb live-aboard dive cruises; 2-18 divers
U.S. agent for local dive operators.
50 Francisco St., 205A, San Francisco, CA 94133.

LADY JENNY V 404/922-1155 USA; UK: 0789-763645
Red Sea Adventures. In 5th year of continuous operations
from Sharm-el-Sheikh. 32 departures/year w/AC comfort. Unlimited
diving, biggest selection of dive sites offered, British crew.

LUCKY DIVERS—The Best Way Into The RED SEA Since Moses!
Ultimate Dive Adventure! Boat safari to Ras Muhammad.
Dive/Hotel Pkg. avail. Daily guided dives. Modern Dive Shop.
CANADA: Call Mr. Sapina—Quebec 514-461-0110. Tlx: 055 61607.

RED SEA DIVERS, SHARM DIVING, AQUAMARIN, Sharm-el-Sheikh
768385. Dahab Diving Tel. Nuweiba Diving 768832. Tlx: 94002 -
OHTEG UN. HO. 32 Sabry Abu Alam St., Cairo 770200-770301
Diving, eg. lab, windsurf, glass bottom boat, safari, hotels.

RED SEA DIVING SPECIALISTS (800) 348-3669 (212) 599-0886
85' dive boat from Israel to Egypt. Fabled Ras Muhammad and Tiran
Straits. Professional dive travel services. Booking individuals
and groups. 8 day program—\$1500 & 14 day program—\$2500.

RED SEA SPORTS CLUB Tel: 059-79685/76569
King Solomon's Palace & Caravan Hotel
Equip., sales, courses, introductory dives, boats, U/W photo,
water-ski, windsurfing, seafari & more.

SOLOMON ISLANDS

BEST OF SOLOMONS—Exclusive, superb 54' live-aboard dive boat,
6 guests. Enjoy WW II diving and world class tropical reefs.
Professional travel services. Group and individual bookings.
(212) 599-0886 LA MER DIVING SEAFARI, INC. (800) 348-3669

DIVE SOLOMONS (Anuha/Uepi) & VANUATU 415/434-3400
Virgin reefs/fantastic wrecks/sheer dropoffs from resorts.
U.S. agent for local dive operators.
50 Francisco St., 205A, San Francisco, CA 94133.

ISLAND DIVE SERVICES, LTD. 22103
P.O. Box 414, Honiara, Solomon Islands
Dive the WWII Wrecks of Guadalcanal & The Walls
& Reefs of the South Pacific. Full Facil. Tlx: HQ66315.

SOUTH PACIFIC

CORALHEAD DIVING Hdqtrs.—Box 211, Nuku'alofa, Tonga-Ph. 22176.
Full SCUBA support at all local Resorts. PADI Training Facil.
USD Auth. Dealer, Repairs, Full Rntls. & Clean Air.
27' "African Queen" & 17' "White Knuckles" to serve you.

DIVE FIJI and TAHITI 415/434-3400
Taveuni, Qamea, Ste Reta, Manihi, Rangiroa, Kaveka.
U.S. agent for custom designed vacations.
50 Francisco St., 205A, San Francisco, CA 94133.

Galapagos—Unique Diving/Snorkeling (800) 348-3669 (212) 599-0886
Enjoy lizards, seals, sharks, penguins and more. Superb, new 66'
diving yacht, A/C, 12 guests. Custom travel services for groups &
individuals. 8 day economy program \$1500 & 14 day program \$2700.

LA MER DIVING SEAFARI, INC. (800) 348-3669 (212) 599-0886
We dive the South Pacific everyday. Fiji, Australia, Maldives, Papua
New Guinea, Solomons, Galapagos. Specially designed group tours
for 4-10 divers & photographers on selected live-aboard boats.

OCEAN VOYAGES 415/332-4681
1709 Bridgeway, Sausalito, CA 94965 Tel: 470561 SAIL UI
Dive fabulous Cocos Island, 12 days \$1,595 per person.
Also Galapagos/Tahiti/BVI/Philippines for groups 4-10.

PAIHIA DIVE, HIRE & CHARTER (0885) 27551
P.O. Box 210, Paihia, Bay of Islands, New Zealand
Pro dive store, rentals, sales, service, PADI instruction,
boat charters. Single or group bookings.

TONGA—Fantastic, unique & pure virgin diving. Mammoth
cave systems, dropoffs, 200+ feet average visibility.
Air/land/dive packages. Tropical Adventures, 170
Denny Way, Seattle, WA 98109. Nat'l (800) 247-3483.

THAILAND

Fantasea Divers/Yacht Andaman Explorer—Similan Isl. Dive Cruise
Patong Beach, Box 74, Phuket 83000, Thailand PH: 076321309
Tlx 69513 shpserv th, attn. Fantasea. PADI facility
USA Rep.: (800) 443-0799 Thailand Experts/Adventure Express

SUBMARINE DIVERS Intern. Diving Center, Kata-Karon Beach
P.O. Box 101, 83000 Phuket/Thailand, Tlx: 69513 SHPSERV Attn:
Subm.D., Diving Tours & Expedition 1-7 days, 2 Dive-Boats (65 ft)
PADI Training Fac. Write now for free color brochure.

TURKS & CAICOS

THIRD TURTLE INN 800/323-7600
Providenciales, Turks & Caicos Islands 312/655-5678
A small resort in a class by itself. PADI dive shop. 3
dive boats, group rates avail. gourmet dining, luxurious accom.

SEA DANCER, PETER HUGHES DIVING 800/367-3484, 607/277-3484
Peter Hughes Diving/Divi Hotels, 520 W. State St., Ithaca, NY 14850
Live-aboard 110' spacious floating dive resort. Unlimited diving/on-
board compressors & photo lab. 7 night pkgs. out of Grand Turk.

U.S. VIRGIN ISLANDS

AQUA ACTION 809/775-6285
P.O. Box 12138, Charlotte Amalie, St. Thomas; USVI 00801
Scuba, instruction, windsurfing. Custom dive & snorkeling
tours with personality! Boutique, sales and service.

CARIBBEAN SEA ADVENTURES 809/773-6011
P.O. Box 3015, Christiansted, St. Croix, USVI 00820
4 Dive boats to walls, drop offs, Buck Island Natl. Park.
Individuals or groups, package rates available.

CHRIS SAWYER DIVING CENTER 809/775-7320
41-6-1 Estate Frydenhoj, St. Thomas, USVI 00802
Full svcs. NAUI pro facility, personal svcs., quality guaranteed,
42' custom dive boat. Send for VI diving info. packet.

CINNAMON BAY CAMPGROUND & WATERSPORTS CENTER
PADI Certified Instruction, Shipwrecks, Reef Dives.
5 Days accommodation and 5 dives \$400.00 per person,
Includes all equipment. 809/776-6458

CONDOS FOR RENT 800/874-0009
St. Thomas, St. Croix, Cayman, Hawaii, Keys.
Over 800 privately owned units, 1-3 bedrooms.
Moderate to luxury.

CRUZ BAY WATERSPORTS CO., INC. 809/776-6234
P.O. Box 252, St. John, U.S.V.I. 00830
PADI Pro Facility, full service store, instruction, dive pkgs.
Daily reef and wreck dives, wreck of "Rhone" every Thursday.

DIVE EXPERIENCE, INC. 809/773-3307
P.O. Box 4254, Christiansted, St. Croix, USVI 00820
Custom Dive Boat—PADI 5 Star Training Facility
Introductory dives to instructors course. Hotel packages.

JOE VOGEL DIVING CO.—EX—UDT Center: 809/775-7610
P.O. Box 7322, St. Thomas, USVI 00801
Oldest cert'd diving school in USVI. Joe conducts all scuba instr.,
day, night, wreck dives & snorkel tours. U/W photo. Pers. service.

REEF DIVERS 1-800-524-2096
P.O. Box 9531, St. Thomas, Virgin Islands 00801
40' Glass Bottom Dive Boat. Scuba instr., guided tours,
snorkeling, sailing, other island tours, car rentals.

SAIL & DIVE THE U.S. & BRITISH ISLES ON THE EVENTIDE
A personalized cruise with Capt./Divemaster Bob Even.
Compressor/Tanks/Dive Gear incl. 7 days: \$800 per person
based on 4 persons. Call free: VI Scuba/Sail 800/524-2005.

SEA SHADOWS SCUBA 809/778-3850
P.O. Box 505, Cane Bay, St. Croix, USVI 00820
Full service center @ Cane Bay. Air, rentals, sales, instruction
& tours of spectacular drop-off walls of the north shore.

ST. JOHN WATERSPORTS (THE DIVE SHOP) 809/776-6256
Box 70, St. John, U.S.V.I. 00830 809/776-6042
Scuba, snorkel, dive sail, rentals, air, wreck dives
and PADI Certification.

V.I. DIVERS LTD. 809/773-6045
Pan Am Pavilion, Christiansted, St. Croix, USVI 00820
Full service dive shop, NAUI & PADI, hotel packages.
40' dive boat. Diving St. Croix since 1971.

WINDWARD ISLANDS

ANSE CHASTANET HOTEL SCUBA ST. LUCIA 809/454-7355
P.O. Box 216, Soufriere, St. Lucia, West Indies Tel: 0398-6370
Dive packages, accom, bars, restaurant, snorkel, resort courses,
air, rentals. Compl. windsurf, sailing, tennis. 800/328-5285

DIVE ST. VINCENT 809/458-4714
P.O. Box 864, St. Vincent, West Indies 809/457-4409
Diving with a personal touch. Full service shop, NAUI, PADI,
NASE, CMAS. Non-cattle boat diving. Dive packages available.

SKIN DIVER ADVERTISER DIRECTORY

ADVERTISER	PAGE NUMBER	ADVERTISER	PAGE NUMBER	ADVERTISER	PAGE NUMBER	ADVERTISER	PAGE NUMBER
ALM AIRLINES.....	118	CORAL STAR.....	135	LAHAINA DIVERS.....	124	SEA FEVER DIVING.....	141
ADORAMA.....	149	CRESSI-SUB.....	88	LA MER DIVING/EXOTIC.....	139	SEAQUEST.....	18
ADVENTURE EXPRESS.....	58	CRUZAN DIVERS.....	134	LA MER DIVING/CAYMAN.....	139	SEA SCHOOL.....	131
ADVENTURE EXPRESS.....	139	CURACAO TOURIST BOARD.....	106	LA MER DIVING/NEW GUINEA.....	139	SEAWARD HOLIDAYS.....	82
ADVENTURE EXPRESS.....	139	DACOR CORPORATION.....	7	LA STREGA.....	137	SEE & SEA TRAVEL.....	76
AGGRESSOR LTD.....	81	DESTINATION HAWAII.....	135	LEISURE TIME INT'L.....	131	SEE & SEA TRAVEL.....	108
AMERICAN DIVING H.Q.....	126	DIVE ABACO.....	127	MCA HOME VIDEO.....	27	SEE & SEA TVL/BELIZE.....	139
AMERICAN LEISURE.....	92	DIVE B.V.I.....	148	MARK SIEGAL.....	130	SHERWOOD SCUBA.....	21
ANDROS UNDERSEA ADVENTURES.....	113	DIVERS ACADEMY.....	140	NAUI COLLEGE.....	55	SINAI HOTEL & DIVING.....	139
ANTHONY'S KEY.....	65	DIVERS INSTITUTE OF TECH.....	43	NAUI PROF. DIVE CENTER.....	57	SKIN DIVER WET SUITS.....	142
AQUALA INC.....	124	DIVERS SUPPLY/MACON.....	143	NASSAU UNDERSEA ADVENTURES.....	115	SPARE AIR.....	C3
AQUANAUT WATERSPORTS.....	123	DIVERS UNLIMITED.....	120	NEPTUNO DIVERS.....	93	SPORT EUROPA.....	33
AQUA VIDEO.....	136	DIVERS' WORLD.....	116	NICK'S AQUA SPORTS.....	86	SPORTS MERCHANDISER.....	146
AQUA TREK.....	100	DIVI BAHAMAS.....	97	NIKON.....	11	SPYDERCO.....	54
AQUAVOX INC.....	23	DIVI BARBADOS.....	105	NIKON.....	15	STUDIO GALLERY.....	130
BAHAMAS TOURISM.....	96	DON FOSTER'S.....	98	NORTHWEST DIVERS SUPPLY.....	146	SUB VIDEO PRODUCTIONS.....	123
BARBACHANO TRAVEL SERVICE.....	98	DREAM TEAM.....	126	OCEAN CORPORATION.....	17	SUNSET HOUSE.....	93
BASKIN IN THE SUN.....	122	EL PLACER DEL CARIBE.....	88	OCEAN DIVERS/MARINA DEL MAR.....	119	SURFSIDE WATERSPORTS.....	117
BAUER COMPRESSORS.....	56	EREBUS HOTEL.....	109	OCEAN EXPO.....	93	SURFSIDE WATERSPORTS.....	125
BAYMAN BAY CLUB.....	66	FISHER RESEARCH.....	140	OCEANIC U.S.A.....	C2	TLC COMPANY.....	126
BERRY SCUBA.....	138	FLAMINGO BEACH HOTEL.....	99	OCEAN QUEST INT'L.....	129	TABATA U.S.A.....	C4
BIMINI UNDERSEA ADVENTURES.....	113	FONATUR.....	73	OCEAN RAY.....	144	TAG-HEUER.....	3
BLACKBEARD'S CRUISES.....	92	GALAPAGO INN.....	136	OMEGA DIVING.....	108	TAN SAHSA AIRLINES.....	69
BLACK BART'S AQUATICS.....	148	GO DIVING.....	127	OMEGA DIVING.....	141	THE BELIZE CONNECTION.....	132
BLUE WATER DIVERS.....	109	GREAT LAKES INSTITUTE.....	56	ON THE RUN.....	144	THE COMPLETE DIVER.....	112
BOB SOTO'S DIVING.....	89	HWL.....	58	OUT ISLAND DIVERS.....	124	THE DIVE SHOP.....	130
BONAIRE BEACH HOTEL.....	80	HALL'S DIVING CENTER.....	128	PADI.....	50	THIRD TURTLE.....	108
BOTTOM TIME.....	131	HELIX LIMITED.....	145	PADI INT'L COLLEGE.....	49	TIARA BEACH HOTEL.....	103
BRIAC REEF BEACH RESORT.....	85	HENDERSON AQUATICS.....	23	PDIC.....	124	TILDEN'S PRO DIVE SHOP.....	133
BROWNIE'S 3RD LUNG.....	134	HOLIDAY INN GRAND CAYMAN.....	84	PELICAN TOURS.....	140	TREASURE ISLAND HTL.....	102
BUCCANEER'S INN.....	119	HONDURAS TOURIST BOARD.....	63	PHILIPPINE AIRLINES.....	111	TRIMARINE BOAT CO.....	137
BUDDY'S DIVE SHOP.....	134	HOSPITALITY WORLD.....	105	PIONEER.....	55	TRIP & TOUR.....	121
CSA/BUCCANEER HOTEL.....	118	HYATT HOTELS.....	87	PISCES DIVERS.....	148	TRI-STATE CAMERA.....	148
CAP'N DON'S HABITAT.....	112	HYPERTECH.....	132	POSADA DEL SOL.....	67	TROPICAL ADVENTURES.....	139
CAP'N DON'S HABITAT.....	127	IKELITE.....	37	POSEIDON VENTURES.....	85	TROPICAL CONCEPTS.....	128
CAPT. SLATE'S ATLANTIS.....	100	INNOVATIVE DESIGNS.....	117	PYRAMID ISLAND.....	130	TROPIC BIRD.....	88
CAPTURED MOMENTS.....	54	INT'L DIVING EXPEDITIONS.....	58	QUARRY PRODUCTS.....	116	TURKS & CAICOS.....	108
CASA DEL MAR/LA CEIBA.....	114	INT'L SCUBA VENTURES.....	131	REAL HAWAII.....	132	UNEXSO.....	110
CASA DEL MAR/TWO WORLDS.....	121	ISLAND PRINCESS.....	109	REEF HOUSE RESORT.....	70	ULTRA RESEARCH CORP.....	42
CENTRAL SKIN DIVERS.....	147	ISLAND PROPERTIES REPORT.....	127	RIDING ROCK INN.....	120	V.I. SCUBA/SAIL.....	121
CENTRAL PACIFIC DIVERS.....	133	ISLAND REEF HOTEL.....	109	ROBERT L. STRAIGHT.....	50	VIRGIN ISLAND SAILING.....	139
CHAPMAN SCHOOL OF THE SEA.....	149	J.W. FISHERS.....	55	ROLEX.....	9	WALKER'S CAY HOTEL.....	126
CHUB CAY UNDERSEA ADVENTURES.....	115	JAMAICAN TOURIST BOARD.....	83	SAM MCCOY'S (J-MAR).....	123	WENOKA.....	4
COASTAL SCHOOL.....	58	KEENE ENGINEERING.....	42	SAND DOLLAR BEACH CLUB.....	136	WEST END DIVING.....	122
COCO VIEW RESORT.....	64	KENLEE'S ISLAND DREAMS.....	129	SCUBA CONNECTION.....	80	WET PLEASURES.....	109
COLLEGE OF OCEANEERING.....	32	LA CEIBA BEACH HOTEL.....	125	SCUBA WORLD.....	147	WHITE'S ELECTRONICS.....	56
COMM'L DIVING INSTITUTE.....	149	LA CEIBA HOTEL.....	135	SEA DANCER LIVE-ABOARD.....	101	WIMP DIVER.....	54
CONTINENTAL AIRLINES.....	92	LACSA AIRLINES.....	68	SEA FANS VIDEO MAGAZINE.....	59	WINDWARD/AARONS.....	116

I Learned About Diving From That

Beach Diving In The Rain

TEXT AND PHOTOGRAPHY BY TOM SHORTEN

A few weeks ago, while cleaning out a bookcase, I stumbled on a cache of old logbooks. Thumbing to the beginning of the oldest, I found the record of my first open water dives—a beach dive and a boat dive during my certification class—and the entry for my first foray as a newly certified diver. The notation was concise: "Dead Bust."

While this was not the worst day of my life, I still remember it vividly. There could have been a slightly different ending and the entry might have been missing the word "Bust" if it hadn't been for solid training from my dive instructor. Paradoxically, it was the same training that got me and my buddy in a jam in the first place.

It helps to know a little bit about our dive instructor. He had the patience of a saint, the physique most men would kill for, a love of diving and a firm belief that caution had its place in your dive bag with the rest of your gear.

As part of the class, we made a number of beach dives in the Los Angeles area, most of them off the Palos Verdes Peninsula. The main feature here, aside from large, gracious, hideously expensive homes, are the cliffs overlooking the Santa Monica Bay and San Pedro Channel. At the northern end of the peninsula, at its juncture with the mainland, is a relatively protected area where we practiced beach and rock entries.

In addition to the time we spent working our way in and out of the water, there was a lot of thumping up and down the steep, paved path to the beach and through the sand to the water's edge. By the end of the class, almost all of us had enough new muscle to help counteract our new-diver mistakes, which turned out to be a very good thing.

The class ended in late November and my buddy and I figured diving looked like a use it or lose it proposition. We knew California has the largest fleet of dive boats in the nation, but figured we'd get some bottom time in on the beaches, the better to avoid embarrassing ourselves in front of a lot of strangers.

This is what led us, that December Saturday, to be cruising along Palos Verdes looking for Christmas Tree Cove where the diving was supposed to be excellent. It was a gray, chilly morning with a moderate wind off the ocean. Buttoning our coats, we trotted across a vacant lot and looked down at the cove. The water looked smooth, but from more than 100 feet above, it's hard to get a good idea of wave height. Before getting into our wetsuits, we dug our caution out of the dive bags and went down to the beach for a closer look.

At the bottom, the conditions still pointed to

an easy dive, but a look up the "path" was another matter. Hopping from toehold to toehold on the way down hadn't seemed too tough. But without the help of a couple of Sherpa bearers we'd have been hard-pressed to get our gear back up. Scratch one dive site.

We hiked back up the path. When we reached the top, we stood hunched over, panting. We weren't about to let the day go to



waste, though. There was supposed to be good diving at Point Vicente, just a little farther down the road.

By now we were at the point where we didn't want to let ourselves get psyched out. It's like eating peanuts, once you start it's real tough to stop, so we really wanted to make our first dive alone as certified divers. That's probably why the detours around portions of the road that had slipped into the Pacific didn't deter us a bit.

By the time we pulled into the parking lot at Point Vicente, the wind had picked up and the day was getting darker. Still, the area we were planning to dive was protected by the point and the water conditions didn't look too bad. Once again, however, we were high above the water looking down. I'm talking high, too. It looked like about 200 feet. We could see people on the beach fishing, but they looked like ants. Fortunately, there is a path that winds from the parking lot to the water. Down we went to check it out.

The path ends on the right side of the cove while what passes for a beach is over to the left. By this time our thighs were starting to quiver and neither of us wanted an extra walk so we decided to make a rocky entry over some boulders. Back up the cliff we slogged. It was longer going up than coming down.

As we wiggled into our wetsuits a dark line was developing on the horizon and the wind began gusting harder. It looked like a storm, but we figured there was plenty of time to get

down, into the water and back up before it hit. Back down we went in our rented wetsuits, with steel '72s and weightbelts on and our booties kicking up little puffs of reddish dust.


By the time we got to the bottom for the second time, this was starting to look like a real dumb idea. (Experienced divers will have probably noted this started looking like a dumb idea a few paragraphs ago.) But we were already down and decided we might as well make a dive before going back up Cardiac Hill. Over the boulders we went, slipping a little on algae exposed by the falling tide. Finally, we made the water and we were in business. Or rather, my dive buddy was. I didn't have enough weight and bobbed like a cork until I was able to grab a couple of rocks and stuff them into my goodie bag.

The surge got steadily worse. The storm had swept in faster than we had anticipated and we were starting to get battered against the rocks. One swell smacked me into a boulder and the large urchin I crushed with my knee left a lot of spines behind. After 10 more minutes of pounding, my buddy and I dragged ourselves from the water. We faced a boulder-strewn crawl appreciably longer than the one a short while earlier—courtesy the falling tide. The algae coating on the rocks made them feel slick as ice. Trying to walk over them was asking for a slip and a broken leg so we crawled, fins in hand, about 20 yards to the beach.

But the best was yet to come. Rain had turned the path from dust into a slippery mud. For every step forward our feet slipped backward half a step. It was a very long walk.

We ended the morning crouched at the top of Point Vicente in a pounding rain watching lightning flicker as the storm swept over us. The final agony lay in stripping off our wetsuits in the cold, beating rain, then jumping into the car to dry off and get dressed.

In one morning we learned a lot. First, having to discuss whether you can handle conditions should be your first hint—you don't want to try it. There will be other opportunities, trust me. Second, don't bully yourself into making a dive if you don't like the conditions. If something in the back of your mind is telling you not to, don't. Finally, if you can possibly avoid it, don't dive on a falling tide. This can save you a lot of trouble, extra swimming and crawling over terrain man was never meant to examine so intimately.

And, I did have the opportunity to get back to Palos Verdes and dive off Point Vicente. This time it was the sane way—on a boat where the greatest distance to the water was four feet. No more Cardiac Hill for me. 

SKIN DIVER VOL. 36 NO. 10

(ISSN 0037-6345) Published monthly by Petersen Publishing Company, 8490 Sunset Blvd., Los Angeles, California 90069. Second Class postage paid at Los Angeles, CA and at additional mailing offices. Single copy \$2.95. Subscription inquiries phone (213) 854-2470. Subscription rates: U.S. Possessions one year \$19.94. All other countries one year \$29.94. CONTRIBUTIONS: Should be mailed to 8490 Sunset Blvd., Los Angeles, California 90069. They must be accompanied by return postage and we assume no responsibility for loss or damage thereto. Any material accepted is subject to such revision as is necessary in our sole discretion to meet the requirements of this publication. Upon acceptance, payment will be made at our current rate, which covers the author's and/or contributor's right, title and interest in and to the material mailed including but not limited to photos, drawings, charts, and designs, which shall be considered as text. The act of mailing a manuscript and/or material shall constitute an express warranty by the contributor that the material is original and in no way an infringement upon the rights of others. CHANGE OF ADDRESS: Six weeks notice is required to change a subscriber's address. Please give both old and new address and label. Mail to P.O. Box 3295, Los Angeles, CA 90078. POSTMASTER: Send address change to Skin Diver Magazine, P.O. Box 3295, Los Angeles, California 90078.



SHARE AIR.

Look, it's a fact of life, should your diving buddy run out of air, he or she has but one place to turn: *to you.*

If you're wearing a Spare Air system, you can, quite literally, save the day. Simply hand your buddy your bottle of Spare Air while you both rise to the surface. Slowly. Safely. *Independently.* That's the beauty of Spare Air. It's a totally self-contained, refillable, fully independent back-up air system. And the *ultimate* buddy system.

So remember these two cardinal rules:


- Don't leave the surface without a buddy
- Don't dive without Spare Air

Ask your dive shop, or contact Submersible Systems.

SPARE AIR

Submersible Systems, Inc. 18112 Gothard St.
Huntington Beach, CA 92648 (714) 842-6566

Notice: Only those who are properly trained or certified should use or operate life support equipment. © 1987 Submersible Systems, Inc.

A woman with brown hair and blue eyes, wearing a black one-shoulder top, is holding two pieces of diving equipment. In her right hand, she holds a black circular console with a red button and the 'TUSA' logo. In her left hand, she holds a pink regulator with multiple gauges and a compass. The background is dark and textured.

We've made some new advancements in air and see power.

Once again, Tabata's superior innovations make diving easier.

Just one look at Tabata's new Liberator SCA-5ODX console and you can see that we've got a whole new slant on convenience. Since the housing is angled, all it takes is a turn of your wrist for an instant status report. What's more, we put the compass where it belongs: up on top with the easy-to-read PSI, temperature and depth gauges. There's even a handy aluminum emergency knife hidden on the back.

Like the console, the new Liberator TR-200 regulator comes in a variety of Tabata's famous hot colors. And it features a purge slide-lock which relieves pressure on the demand valve during storage. Rated at 4000 PSI, the TR-200 has a 360° swivel top plus two high pressure and four low pressure ports.

Tabata Liberator. For uninhibited diving pleasure.

Tabata
Liberator Series